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THE
EASTERN ORIGIN
OF THE
CELTIC NATIONS

E. S. H. 1031

PROVED BY A COMPARISON OF

Their Dialects

WITH THE

SANSKRIT, GREEK, LATIN, AND TEUTONIC

Languages.



FORMING A SUPPLEMENT TO RESEARCHES INTO THE
PHYSICAL HISTORY OF MANKIND.

BY

JAMES COWLES PRICHARD, M. D. F. R. S. & c.

OXFORD,

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560.

TO
THE REVEREND
WILLIAM DANIEL CONYBEARE, A.M. F.R.S. &c.
RECTOR OF SULLY,
AND TO
PROFESSOR JACOB GRIMM
OF
THE UNIVERSITY OF GOETTINGEN,
THIS WORK IS INSCRIBED,
IN TESTIMONY OF
THE HIGH RESPECT AND REGARD
OF
THE AUTHOR.

ADVERTISEMENT.

THE treatise now laid before the public forms a Supplement to my "Researches into the Physical History of Mankind," and was announced in the first edition of that work, which was printed in 1813. Of the motives which induced me so long to withhold it, and of those which have at length determined me to the publication, a sufficient account will be found in the Introduction; and I have only a few words to premise on the circumstances and designation under which the work now appears.

It is termed, a Supplement to Researches into the Physical History of Mankind, because it was undertaken with the view of furnishing proofs of a series of facts, of which little more could be introduced into that work than general statements, containing the results of inquiries which had been sufficient for my own conviction. It forms, however, a distinct treatise, in exclusion of its reference to the history of nations or races of men; and it may be proper to remark, that some of the philological researches which it contains have been pursued into greater extent than the primary object of the work may seem to have required. If this is in one respect a fault, it may be hoped that contingent advantages in another

point of view will be found to atone for it. The examination of cognate languages, while it points out their resemblances and proves the affinity of the races of men of which they formed the vernacular speech, seldom fails at the same time to elucidate, in a greater or less degree, the structure of the respective idioms themselves; and it will appear, if I am not mistaken, that the relation of the Celtic dialects to the other languages brought into comparison with them, furnishes the means of throwing some light on the European idioms in general. I have followed the investigation which thus suggested itself, and have stated the results. If the latter are well established, they will be found both interesting by themselves to the philologist, and will at the same time strongly confirm the principal inferences obtained in respect to the origin and mutual affinity of the European nations.

As I have had occasion in several parts of this treatise to allude to the grammatical forms of some languages, with which I am but imperfectly acquainted, I have endeavoured to cite correctly the authorities on which I have depended for information. The names of various grammarians and other writers on philological subjects, with the designations of their works, will be found in the marginal references scattered through the following pages, and need not be mentioned in this place. But there are four living authors to whom in a more especial manner I am indebted, and am anxious to acknowledge

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my obligation. These are Mr. H. H. Wilson, the learned secretary of the Asiatic Society, author of the Sanskrit dictionary, and Professors Bopp, Rosen, and Grimm, to whose well known works I have made throughout this essay frequent references.

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INTRODUCTION.

SECTION I.

Different opinions respecting the population of the world—Autochthones—Hypothesis of the ancients—Modern opinion—Way of investigating the subject—Physical evidence—Comparison of languages—How far this inquiry has tended to elucidate the history of nations—General relations and value of philological inquiries.

MANY writers on natural history and geography have maintained the opinion that each particular region of the earth must have been supplied from the beginning, by a separate and distinct creation, with its peculiar stock of indigenous or native inhabitants. Among the ancients this notion prevailed almost universally. There existed, indeed, in the pagan world an obscure tradition of a primitive pair fashioned out of clay by the hand of Prometheus or of Jupiter; but this belonged to mythology; which, in its literal sense, at least, was of little authority with the best informed, and the frequent occurrence of such terms as *autochthones*, *indigenæ*, or *aboriginal inhabitants*, whenever reference is made to the population of different countries, indicates a general prevalence of the ideas which such expressions are fitted to suggest. The prevailing opinion in modern times has referred all the nations of the earth to a common parentage; and this it has done chiefly, as it would appear, on the authority of our Sacred History, the testimony of which seems hardly to be re-

conciled with a different hypothesis. Of late, however, many learned men, chiefly on the continent, have been strongly inclined to adopt an opinion similar to that of the ancients; and this seems now to be gaining proselytes among the French naturalists and physiologists, and among writers on history and antiquities in Germany. Some of the former speak of the Adamic race as of one among many distinct tribes. Von Humboldt, who has collected so many evidences of intercourse between the inhabitants of the eastern and western continents, yet seems to have regarded the primitive population of America as a distinct and peculiar stock. The celebrated geographer Malte Brun has plainly taken it for granted that each part of the earth had indigenous inhabitants from the earliest times, into whose origin it is vain to make inquiries; and even the accomplished Niebuhr, who is not more distinguished by the great extent of his learning than by the novelty and ingenuity of his critical speculations, has adopted a similar opinion in connexion with his researches into the early history of Italy ^a.

It would be no difficult matter to cite names of equal celebrity on the other side of this question ^b, but it is not by the authority of opinions that it can ever be decided. The most learned men, and those of the most profound research, are equally liable with ordinary individuals to adopt erroneous notions on subjects which lie beyond a particular sphere; they are perhaps even more disposed to prejudices of certain kinds. It is only by examining the evi-

^a Römische Geschichte von N. G. Niebuhr. 1. Ausgab. Vorrede, p. 38.

^b Sir W. Jones.

dence which may be drawn from a variety of different sources, that those persons who feel interested in this inquiry can hope to arrive at a satisfactory conclusion.

Perhaps those arguments which bear with the greatest weight upon this question, and on which the ultimate opinion of philosophers respecting it is to be determined, are considerations resulting from a survey of the natural history of the globe, and facts connected with physical geography, and with the multiplication and dispersion of species both of animals and plants. On the evidence which is to be deduced from these sources, I shall say nothing at present. I have endeavoured to take a comprehensive view of the whole of this subject in my Researches into the Physical History of Mankind.

Among the investigations which belong exclusively to the history of our own species, an analysis of languages, affording the means of comparing their component materials and ascertaining their affinities and diversities, is one of the most important.

It must be a matter of regret to those who are aware of the real value of this resource, that it has been applied with so little judgment, and that many writers who have devoted themselves to the study of what is termed *philology* have mixed up so much that is extravagant and chimerical with the results of their researches, as not only to throw a shade of doubt and uncertainty over them, but even to bring ridicule and contempt upon the pursuits in which they have been engaged. A fondness for wild conjecture and for building up systems upon the most inadequate and precarious foundations has been supposed to belong to the whole class of writers on the

history and affinities of languages, and it has certainly prevailed in no ordinary degree among them. Even some of the latest works on these subjects, though abounding with curious and valuable information, are in a particular manner liable to this censure. The treatise of Professor Murray on the European languages, though it displays extensive knowledge and diligent research, is scarcely mentioned without ridicule; and in the *Asia Polyglotta* of M. Julius Klaproth, which has added very considerably to our acquaintance with the dialects and genealogy of the Asiatic races, we find the results of accurate investigation mixed up and blended with too much that is uncertain and hypothetical. It must, however, be allowed, that there are not a few writers, in both earlier and later times, who are scarcely, if in any degree, chargeable with the same faults, and whose acuteness and soundness of discernment are equal to their extensive and profound erudition. This may be truly said of Vossius and Edward Lhuyd among the philologists of former ages, and in more recent times of Professor Vater, the Schlegels, Bopp, and Professor Jacob Grimm.

The comparison of languages is perhaps incapable of affording all the results which some persons have anticipated from it. It would be too much to expect from this quarter to demonstrate the unity of race, or an original sameness of idiom in the whole human species. But this resource, if properly applied, will furnish great and indispensable assistance in many particular inquiries relating to the history and affinity of nations.

It would be easy to point out instances in which the examination of languages has rendered substan-

tial and undoubted services to the historian. The history of the Goths, who conquered the Roman empire, will furnish an example. The real origin of this people could not have been known with certainty, if we had not come into possession of an ample specimen of their language in the version of Ulphilas. By this we learn that they were not Getæ or Thracians, as most of the writers who lived near to the era of the Gothic invasion supposed them to be, and as some modern historians have maintained, but, in conformity with their own traditions, nearly allied in kindred to the northern tribes of the German family.

The origin of the Polynesian races has been illustrated by an investigation in one respect similar. Some of these tribes are found in islands so distant from all other inhabited regions, as to furnish an argument in favour of the opinion, that they had the beginning of their existence in their present abodes. But a comparison of their languages has furnished proof that all the most remote insular nations of the Great Ocean derived their origin from the same quarter, and are nearly related to some tribes of people inhabiting a part of the Indian continent and the isles of the Indian archipelago.

Even the history of the African and American tribes has been in many particulars elucidated by an inquiry into the relations of their languages, though the results which have been obtained have not proved to be precisely those which were hypothetically anticipated, and with hope of arriving at which these researches were in part undertaken.

Philologists have sought in vain in the old continent for a nation, from whose speech the diversified

idioms of America may with any degree of probability be derived; but an examination of the American languages themselves has led to some interesting results. The native races of North America are referred by a classification of their dialects to a few great divisions, several of which extend as radii issuing from a common centre in the north-western part of the continent, where it is divided from Asia by Behring's Strait. The traditions prevalent among the ancient Mexicans seem to have derived credit from the discovery of a chain of nations extending almost from New Mexico to Mount St. Elias, in the neighbourhood of the Esquimaux Tschugazzi; their languages, particularly those of the Ugalyachmutzi and Koluschians, bearing a curious analogy to that of the Aztecs and Tlaxcallans. Another series of nations, the Karalit, or Esquimaux, connected by affinities of dialect, has been traced from the settlements of the Tschuktschi in Asia, along the polar zone to Acadia and Greenland. Light has also been thrown in a similar manner on the history of the Lenni Lenape, and the great kindred family of Algonquin nations, on that of the Iroquois, and likewise of the Floridian and other races of North America, by a comparison of their national traditions with the indications discovered in their dialects. One circumstance, which is perhaps of more importance than all the preceding, is the singular congruity in structure between all the American languages, from the northern to the southern extremity of the continent. To this I only allude at present, having already in another place surveyed the facts on which the observation is founded, as they have been developed by the re-

searches of Barton, Hervas, Von Humboldt, Heckewelder, and Duponceau. In Africa a remarkable and interesting fact was the discovery of a nation occupying nearly the whole northern region of that continent, to which the Kabyles of Mauritania and the Tuarik of the Great Desert belong, and whose branches extend from the Oasis of Siwah on the eastern, to the mountains of Atlas, and even to the Canary islands, on the western side; the Guanches, the old inhabitants of those islands, whose remains are said to lie embalmed in the mummy caves of Teneriffe, spoke, as it appears, a dialect of the same language as the Kabyles and Berbers. The Felatahs, who have spread themselves over the interior countries of Nigritia, have been traced by a similar investigation to the mountainous districts above the Senegal, where the Foulahs, who speak the same language, have been long known to Europeans as a people in many respects distinguishable from the Negroes. To the southward of the equator a connexion still more extended has been discovered among the native tribes across the whole of the same continent from Caffraria and the Mosambique coast, on the Indian ocean, to the countries which border on the Atlantic, and form a part of the region termed the empire of Congo.

I have thus pointed out some of the most striking instances, well known to those who have made philological subjects their pursuit, in which researches of this kind have thrown some light on the origin and affinities of nations, when all other historical resources have failed. I shall presently consider the application of this inquiry to the European nations, as this is my principal object in the present work.

It is requisite, however, before I proceed so far, to make some general remarks on the evidence which languages appear to furnish in proof of the affinity of nations.

The use of languages really cognate must be allowed to furnish a proof, or at least a strong presumption, of kindred race. Exceptions may indeed, under very peculiar circumstances, occur to the inference founded on this ground. For example, the French language is likely to be the permanent idiom of the negro people of St. Domingo, though the latter are principally of African descent. Slaves imported from various districts in Africa, having no common idiom, have adopted that of their masters. But conquest, or even captivity, under different circumstances, has scarcely ever exterminated the native idiom of any people, unless after many ages of subjection, and even then vestiges have perhaps always remained of its existence. In Britain the native idiom was nowhere superseded by the Roman, though the island was held in subjection upwards of three centuries. In Spain and in Gaul several centuries of Latin domination, and fifteen under German and other modern dynasties, have proved insufficient entirely to obliterate the ancient dialects, which were spoken by the native people before the Roman conquest^c. Even the Gypsies, who have wandered in small companies over Europe for some ages, still preserve their original language in a form that can be everywhere recognised.

But the question is here naturally suggested,

^c Without adverting to the Bas Bréton, the Basque in Aquitaine and the Biscayan in Spain afford proofs of the fact above asserted.

what degrees and species of resemblance must be considered as indicating any given languages to be cognate, or as constituting their affinity? In advert-
ing to this inquiry I shall be allowed to repeat some remarks which I have made on a former occasion.

A comparison of various languages displays four different relations between them.

1. In comparing some languages we discover little or no analogy in their grammatical structure, but we trace, nevertheless, a resemblance more or less extensive in their vocabularies, or in the terms for particular objects, actions, and relations. If this correspondence is the result of commercial intercourse, or conquest, or the introduction of a new system of religion, literature, and manners, it will extend only to such words as belong to the new stock of ideas thus introduced, and will leave unaffected the great proportion of terms which are expressive of more simple ideas and universal objects. Of the description now alluded to is the influence which the Arabic has exerted upon the idioms of the Persians and the Turks, and the Latin upon some of the dialects of Europe. But if the correspondence traced in the vocabularies of any two languages is so extensive as to involve words of the most simple and apparently primitive class, it obviously indicates a much more ancient and intimate connexion. There may be instances in which this sort of affinity is so near as to render it probable, that the dialects thus connected had a common origin, and owe the diversities of their grammatical forms to subsequent changes and difference of culture.

2. There are certain languages which have very

few words in common, and which yet display, when carefully examined, a remarkable analogy in their laws of grammatical construction.

The most striking instances of this relation are the *polysynthetic* idioms, as they are denominated by Mr. Duponceau, of the American tribes, and the monosyllabic languages of the Chinese and Indo-Chinese nations.

3. A third relation is discovered between languages which are shewn to be connected by both of the circumstances already pointed out. These are the languages which I venture to term *cognate*. The epithet is applied to all those dialects which are connected by analogy in grammatical forms, and by a considerable number of primitive words or roots common to all, or in all resembling, and manifestly of the same origin.

4. A fourth relation exists between languages in which neither of the connecting characters above described can be discerned; when there is neither analogy of grammatical structure, nor any correspondence in words sufficient to indicate a particular affinity. Such languages are not of the same family, and they generally belong to nations remote from each other in descent, and often in physical characters. But even among languages thus discovered, a few common or resembling words may often be found. These resemblances are sometimes casual, or the result of mere accident: in other instances they are perhaps too striking and too numerous to be ascribed to chance or coincidence. Such are the phenomena of connexion which M. Klaproth hypothetically terms *antediluvian*, and those which Mr. Sharon Turner has lately pointed out between the

idioms of nations very remote from each other. More strongly marked are the traces of approximation observed by Professors Barton and Vater between the vocabularies of tribes in North and even in South America, and the dialects of the Samoiedes, Yukagers, and other races in North-eastern Asia. Such facts are sometimes difficult of explanation; in other instances they may lead to interesting results. Whatever may be thought of them, the variety of languages, nearly or wholly unconnected, is on a general survey so great, that it seems difficult to avoid being led to one of two conclusions: either that there existed from the beginning divers idioms, or that the languages of mankind were rendered various by a miraculous change, according to the most obvious import of a well known passage in the book of Genesis. It would be foreign to my present design to consider these opinions more fully, and I shall pass them by with a single remark on each. The former, besides other objections, involves one which has scarcely been adverted to. It implies that the world contained from the beginning, not three or four, as some writers are willing to believe, but some hundreds and perhaps thousands of different human races^d. With respect to the latter, it seems incumbent on those who reject this passage of Sacred History on the ground of its making a reference to a

^d The languages of the African nations, according to Seetzen, who has made the most extensive and original researches into this subject, amount to 100 or 150. In America, there are said to be 1500 idioms "*notabilmente diversi*." Such was the opinion of Lopez, a missionary of great knowledge in the languages both of South and North America. (See Seetzen's letters in Von Zach's *monathliche correspondenz*. 1810. p. 328. and Her-vas's *Catalogo delle Lingue*, p. 11.)

supernatural, and, as it may be termed, an unknown agency, to furnish us with some account of the first existence of our species which does not imply events, at least equally miraculous. Unless the events which certainly took place can be understood in a different way from that in which the Sacred Scriptures represent them, we may rationally adhere to the whole of the same testimony, as involving the operation of no other causes, than such as are both proved and are sufficient to account for the phenomena.

In the inquiry on which I have now to enter, I must confine my view within a narrower sphere, and advert to the relations of languages which, though displaying great variety in their vocabulary, yet approximate in their most essential constituents and are nearly connected in their grammatical formation. Such phenomena can only be explained on the supposition that a different superstructure has been raised by different nations on a basis originally common. Tribes having a common idiom scanty in its stock of words, appear separately to have added to their speech, partly by new invention, and partly by borrowing from their neighbours, such terms as the progress of knowledge among them required. The accessory parts of languages may have come at length to bear a considerable proportion to the primitive one, or even to exceed it, and the grammatical structure may have been diversified under different modes of cultivation. Hence arise in the first place varieties of dialect; but when the deviation is greater in degree, it constitutes diversity of language. The German and French are never termed dialects of one speech; and yet all who compare their respective sources, the old Teutonic and the Latin languages, are aware that

between these, a near and deeply rooted affinity subsists.

Those who will duly weigh the facts which associate themselves with this last consideration, will, I believe, experience no difficulty in admitting all such languages to be cognate, which have in common, together with analogy in grammatical forms, a large number of undoubtedly original and primitive words. Such words are simple vocables, expressive of the most natural and universal objects and ideas, terms for family relations and for the most striking objects of visible nature, as likewise verbal roots of the most frequent and general occurrence. These are elements of language which must have belonged to every tribe of men in their original dispersion over the world, and which must have been the most tenaciously retained, and scarcely interchanged between different nations. When such elementary parts of speech are common to several languages, and when their grammatical structure displays likewise undoubted marks of a real and fundamental affinity, we may be allowed to regard these languages as cognate, though the number of words peculiar to each may be very considerable.

I have dwelt the more fully on this last consideration, because on it will depend the validity of the conclusions which I shall endeavour to draw in the course of the following treatise. I shall now advert particularly to the population of Europe and the history of the races of which it consists.

SECTION II.

Nations of Europe at the earliest periods of history—Eastern origin of several proved by their languages—Indo-European languages—Is the Celtic allied to them?—Denied by several writers—Motives for the discussion of this question.

At that era when the earliest dawning of history begins to dispel the mists which had hovered over the first ages of the world, we find the different races of people in Europe nearly in the same relative situations which they now occupy, and we can discern scarcely a trace, even in the oldest memorials, of those wanderings of tribes which may be supposed to have filled this region of the world with inhabitants. In the remotest quarters of Europe, towards the setting sun, we are told by Herodotus, that the Celtæ and Cynetæ dwelt about the sources of the Ister and the city—perhaps rather the mountains—of Pyrene, and it is unknown during how many ages they had occupied the region thus described, before the father of history obtained these earliest notices of them. It would seem, however, that before the Trojan war even Britain must have had inhabitants, since tin was at that time in use, which was brought from Britain by Phœnician traders^a. We know likewise that the Teutonic nations inhabited the northern countries of Europe at a period not long subsequent to the age of Herodotus. Pytheas, the navigator of Marseilles, who was nearly contemporary with Aristotle, is well known to have made a voyage of discovery towards the north beyond the pillars of Hercules, by far the

^a This at least would appear from the account given by Herodotus of the Phœnician commerce.

most ancient that is recorded in that direction. In the course of this voyage he visited Britain, and even obtained some knowledge of Thule, or Iceland, and of the coast of the Baltic sea. Pytheas mentions the Guttones, who inhabited the shores of an estuary which must have been the mouth of the Vistula, and who carried on with their neighbours the Teutones a traffick in amber, a native production of their country^b. The Teutones are well known under that name; the Guttones are probably the Goths; and thus we already discern in the north of Europe two of the most celebrated nations belonging to the Germanic family, in an age when even the name of Rome had scarcely become known to the Greeks. The Finns and the Slavonians are generally supposed to have been the latest among the great nations who formed the population of Europe. But Finningia and the Fenni are mentioned by Tacitus and Pliny, who place them beyond Germany and towards the Vistula. In the age of these writers the Finns were situated near the eastern parts of the Baltic, and had probably extended themselves already as far as those districts, where their descendants were known under the name of Beormahs or Biarmiers, in the times of Ohthere and St. Olaf. The Slavonians, indeed, are not early

^b "Pytheas Guttonibus Germaniæ genti accoli æstuarium
"oceanî Mentonomon nomine spatîo stadiorum: ab hoc diei
"navigatione insulam abesse Abalum: illo vere fluctibus ad-
"vehi, et esse concreti maris purgamentum: incolas pro ligno
"ad ignem uti eo proximisque Teutonis vendere. Huic et Ti-
"mæus credidit, sed insulam Baltiam vocavit." Plin. Hist. Nat.
lib. xxxvii. cap. 2. The island of Abalus, or Baltia, may be
Abo.

distinguished in Europe under that name, but by the appellation of Wends, given to the Slavonic race by the Germans, we recognise them in the geographical descriptions of Pliny and Tacitus, who mention the Venedi, and place them near the Finns, and on the borders of Finningia. There the *Οὐενέδαι*, or Winidæ, are stationed by Ptolemy and Jornandes, and the last of these writers appropriates expressly the name of Winidæ to the Slavonic nations. It is besides highly probable that the Russians were known to Herodotus, and that they are mentioned by him under a term little varying from that which is now applied to the same people by their Finnish neighbours; for the Finns distinguish the Muscovites by the name of Rosso-lainen, or Russian people, and call themselves and nations of their own kindred Suoma-lainen. The word Rosso-lainen heard and written by a Greek would be Rhoxolani. The Rhoxolani, who are first described by Herodotus, are said in the age of Strabo to have inhabited the plains near the sources of the Tanais and the Borysthenes.

It appears, then, that the European races, in the earliest periods in which we have any information respecting them, held nearly the same relative situations as the tribes of people who are chiefly descended from them still continue to occupy. Thus far the facts which history develops afford no evidence against the hypothesis, that different parts of the world were originally filled with indigenous inhabitants. It would be vain to attempt, merely from traits of resemblance in some customs or superstitions, or even from the doctrines of druidism and the mythology of the sagas, to ascribe a common

origin to the nations of Europe and those of the East. By a similar mode of reasoning we might perhaps as well deduce the Turks and the Tartars from Arabia, and the Buddhists of northern Asia from India or Ceylon. Nor can historical traditions fill up the void. We can only hope by an analysis of the European languages to obtain a proof, that these races of people, having preserved common elements of speech, were connected in origin with the nations of Asia.

The languages of the Finnish nations, the Laplanders, the Hungarians, the Ostiaks, and other Siberian Tschudes, have been compared and carefully analysed by several German and other northern writers, particularly by Gyarmathi, Adelung, Gatterer, and Julius Klaproth. The result that appears to have been sufficiently established is, as I have elsewhere remarked, that all these nations sprang from one original. The primitive seat of this great race of men, or rather the earliest station in which we can discover them by historical inquiries, is the country which lies between the chain of Caucasus and the southern extremities of the Uralian mountains.

But our chief concern at present is with the Indo-European tribes. That term was designed to include a class of nations, many of them inhabitants of Europe, whose dialects are more or less nearly related to the ancient language of India. This discovery was originally made by comparing the Sanskrit with the Greek and Latin. A very considerable number of words were found to be common to these languages, and a still more striking affinity

was proved to exist between the grammatical forms respectively belonging to them. It is difficult to determine which idiom, the Latin or the Greek, approaches most nearly to the Sanskrit, but they are all evidently branches of one stem.

It was easily proved, that the Teutonic as well as the Slavonian dialects, and the Lettish or Lithuanian which are in some respects intermediate between the former, stand nearly in the same relation to the ancient language of India.

Several intermediate languages, as the Zend and other Persian dialects, the Armenian and the Ossete, which is one of the various idioms spoken by the nations of Caucasus, have been supposed by writers who have examined their structure and etymology to belong to the same stock^c.

Thus a near relation was proved to subsist between a considerable number of dialects spoken by nations who are spread over a great part of Europe and Asia. It may be remarked, that the more accurate the examination of these languages has been, the more extensive and deeply rooted their affinity has been discovered to be. Those who are acquainted with Professor Jacob Grimm's able and lucid Analysis of the Teutonic idioms, will fully admit the truth of this remark. The historical inference hence deduced is, that the European nations, who speak dialects referrible to this class of languages, are of the same race with the Indians and other Asiatics to whom the same observation may be applied; and this conclusion seems to have been admitted by writers who in general have displayed

^c Klaproth, Asia Polyglotta.

little indulgence towards the visionary speculations of philologists^d.

The inquiry has frequently been made, whether the Celtic dialects belong to the class of languages thus allied, for which the term Indo-European is the most suitable designation. The question is an interesting one, because it has a particular bearing on the origin of the nations of western Europe, including the British isles, as well as a more extensive one on the physical history of mankind. We have to

^d The Edinburgh Reviewers, in a late critique, to which the observation in the text may particularly be applied, have remarked: "We are free to confess that the result of our inquiries has been to produce a conviction in our minds that the affinities known to subsist between the Sanskrit, Greek, Latin, and German languages are perfectly irreconcilable with any other supposition than that of their having all been derived from a common source or primitive language spoken by a people of whom the Indians, Greeks, Latins, and Germans were equally the descendants." Ed. Rev. No. 102. p. 562. Baron Cuvier has admitted the same inference as far as it relates to the Indians and the Greeks, which is equivalent to its general admission. He says, "The Pelasgi were originally from India, of which the Sanskrit roots that occur abundantly in their language *do not permit us to doubt*. It is probable that by crossing the mountains of Persia they penetrated as far as the Caucasus; and that from this point, instead of continuing their route by land, they embarked on the Black Sea, and made a descent upon the coasts of Greece." In another passage of the same lecture, M. Cuvier observes, "that the Sanskrit language is the most regular that is known, and that it is especially remarkable for the circumstance that it contains the roots of the various languages of Europe, of the Greek, Latin, German, and Slavonic." (Baron Cuvier's Lectures on the Natural Sciences.) He has omitted the Celtic nations, the earliest inhabitants of Western Europe, and perhaps regards them as Aborigines.

inquire whether the same arguments which prove most of the other nations in this quarter of the world to have sprung from an eastern origin, may also be applied to that stock whose branches at the earliest period of history were spread over Gaul and Britain, and a part of Spain. Writers on the history of languages and the antiquity of nations have been divided with respect to this question. Adelung and Murray have regarded the Celtic as a branch of the Indo-European stock. But the latter of these writers has passed over the subject in a very cursory manner, or rather, he has left that part of his work which relates to the Celtic dialects in an incomplete state. And Adelung, who has been followed in this particular by many foreign writers, has committed the error of supposing the Welsh tongue to be a descendant from the language of the Belgæ, and not from that of the Celtæ, who inhabited the central parts of Gaul, and, as it is generally supposed, of Britain. A want of access to information respecting the Celtic dialects has prevented the learned men of Germany from forming correct opinions on their relations to each other, and hence it has arisen, that this department in the history of languages—a subject which has been principally investigated by German writers—still remains but imperfectly elucidated. Many of the continental writers, among whom may be mentioned Frederick Schlegel and Malte Brun, seem to have believed the Celtic to be a language of a distinct class, entirely unconnected with the other idioms of Europe; and in England the same opinion has been expressed by several well-known authors. Mr. Pinkerton has declared in the most positive terms that the Celtæ

were a people entirely distinct from the rest of mankind. He says that their language, "the real Celtic, "is as remote from the Greek as the Hottentot from "the Lapponic." "The mythology of the Celtæ," adds Mr. Pinkerton, "resembled, in all probability, "that of the Hottentots, or others the rudest savages, as the Celtæ anciently were, and are little "better at present, being incapable of any progress "in society." A late writer, in a work of extensive research, at the conclusion of a chapter, in which he has refuted some of the opinions of Pelloutier and Bullet with respect to the Celtæ and their language, thus sums up the general result of his inquiries^e. "With regard," he says, "to the languages of Asia, "I may adopt the words of Davis in the preface to "his Dictionary, after substituting the word *nullam* "for *manifestam*. 'Ausim affirmare linguam Britannicam (Celticam) tum vocibus, tum phrasibus "et orationis contextu, tum literarum pronunciatione, nullam cum orientalibus habere congruentiam et affinitatem^f.' The Celtic, therefore," continues the same writer, "when divested of all words "which have been introduced into it by conquest "and religion, is a perfectly original language: but "this originality incontrovertibly proves that neither Greek, Latin, or the Teutonic dialects, nor "Arabic, Persian, or Sanskrit, were derived from

^e Researches into the Origin and Affinity of the principal Languages of Asia and Europe, by Lieut. Col. Vans Kennedy, &c. London, 1828. p. 85.

^f "I dare to affirm that the British or Celtic language has no "connection or affinity with the languages of the East, either in "words, or phrases, or the construction of sentences, or the pronunciation of letters."

“ the Celtic, since these languages have not any affinity whatever with that tongue.”

In the first edition of my *Researches into the Physical History of Mankind*, which was published in 1813, fifteen years before the work from which the preceding extract has been taken, I ventured to make the following statement on this subject, the result of what appeared to myself an adequate examination.

“ We have remarked above that there is historical proof of the connexion of the Slavonian, German, and Pelasgian races with the ancient Asiatic nations. Now the languages of these races and the Celtic, although differing much from each other, and constituting the four principal departments of dialects which prevail in Europe, are yet so far allied in their radical elements, that we may with certainty pronounce them to be branches of the same original stock. The resemblance is remarkable in the general structure of speech, and in those parts of the vocabulary which must be supposed to be the most ancient, as in words descriptive of common objects and feelings, for which expressive terms existed in the primitive ages of society. We must therefore infer, that the nations to whom these languages belonged emigrated from the same quarters.”

g *Researches* &c. p. 534. The following note was appended to this passage :

“ The author of the review of Wilkins's *Sanskrit Grammar*, in the thirteenth volume of the *Edinburgh Review*, has given a comparative vocabulary of the Sanskrit, Persic, Latin, and German languages, which completely evinces the truth of the position here affirmed, as far as the above languages are con-

The extent which my work necessarily assumed, and the apparent incongruity of filling up any considerable part of a physiological essay with glossaries or remarks on grammatical forms, combined with other reasons in preventing me from entering at full into the proof of these assertions, and the same circumstances operated likewise at the publication of the second edition. I have, however, had the subject occasionally in view during the interval, and have collected from time to time materials for a treatise upon it, which many circumstances have at length determined me to lay before the public. Among these may be mentioned the decided opinion advanced in the work from which I have above cited a passage, proving, unless I am mistaken, that there is not as yet sufficient information before the public on a subject of considerable moment in respect to the history of the human race, and the relation of its various branches to each other. Another motive to this determination has been the advice of some learned friends with whom I have conversed on the subject of the following treatise, and particularly of the two highly distinguished men, to whom it is dedicated.

The main object which I have had in view in the composition of this work has been, to institute such a comparison of the Celtic dialects with the languages allowed to belong to the Indo-European stock, as may tend to illustrate the relation of the Celtic people to the rest of mankind. In the course,

“cerned. But the proof would have been more striking, if he
“had added the Celtic dialects and the Greek. I have made
“an attempt to supply this deficiency, which I intend to make
“public.”

however, of this inquiry, I have incidentally discovered that the relations between the languages above mentioned and the Celtic, is such as not merely to establish the affinity of the respective nations, but likewise to throw light upon the structure of the Indo-European languages in general, and particularly to illustrate some points of obscurity, to which many writers on grammar and etymology have adverted without fully elucidating them. The following pages will contain such remarks as I have thought requisite in this point of view.

SECTION III.

Of the Celtic dialects extant—Modes of orthography—Authorities.

It may be doubted whether the term *Celtic languages* is the most proper epithet for the class of idioms generally designated, and which I shall continue, in compliance with custom, to designate by that name. The Celtæ, properly so called, were a people of Gaul. Of their language we have no undoubted specimen. There are, indeed, strong grounds for believing that it was a kindred tongue with the dialects of the British isles; but it would be better to take the general name of a whole class of languages from something that actually remains.

There are six dialects of the language termed Celtic which may be said to survive, as five are still spoken, and one of them, viz. the Cornish, is sufficiently preserved in books. These six dialects are, the Welsh, the Cornish, the Armorican, the Irish or Erse, the Gaelic or Highland-Scottish, and the

Manks. The three former are relics of the idiom of the ancient Britons; the three latter, of that spoken by the inhabitants of Ireland. We have historical evidence^a that the Britons of Armorica, the Britanni of Gregory of Tours, emigrated from Britain, through the whole extent of which, with the exception of some parts of the southern coast, where the Belgæ from Gaul had settled, it is probable that one language prevailed at the era of the Roman conquest^b. Of this language the three dialects of Wales, Cornwall, and Lower Brittany are descendants. Of the Irish language, the Scottish Gaelic is a slight modification: the Manks differs more considerably, and it is probable that the Isle of Man had inhabitants from this branch of the Celtic stock long before the emigration of the Scots from Ireland to the coast of Argyle.

I shall in general take the Welsh as a specimen of the Britannic dialects, and the Erse, or old Irish, as an example of the other class; but I shall add occasionally words or forms which exist in the subordinate dialects, and are lost, or have become less distinct, in either of the principal ones.

I have experienced some difficulty in adopting a regular method in the orthography of Celtic words. The modern system of representing consonants in the Welsh and the Erse languages is so remote from the usage of other tongues, that I have thought it advisable to deviate from it in some instances. In

^a Chiefly in the works of Gregory of Tours and Eginhardt—I have surveyed the evidence on this subject in my *Researches into the Physical History of Mankind*.

^b That the Caledonians had this language has been proved by Chalmers and Ritson.

the former I have occasionally followed the orthography of Edward Lhuyd, in preference to that which is sanctioned by the authority of the Welsh translators of the Bible. The grounds for this preference will appear obviously in the particular instances in which it has been made, to those who are acquainted with the Welsh language and its pronunciation, and other readers will have no reason to complain of a method which will guide them to the proper utterance of words, when it would otherwise have escaped them. In the Irish orthography, which can scarcely be said to have any fixed standard, I have followed the best authorities within my reach. In the orthography of Sanskrit words I have deviated but little from the system proposed by sir William Jones. In some few instances, however, which will be obvious to those who are acquainted with that method, I have endeavoured to approach more nearly to the habit of our own language^c.

^c I have followed Mr. Yates in substituting for the four Sanskrit diphthongs, ए, ऐ, ओ, औ, the following; *ai, oi, ô, au*. There being some uncertainty as to the exact pronunciation of vowels in ancient languages, it seems allowable to use those vowels as representatives of each other, which in fact generally are found in corresponding words, provided this method is not used in such a manner as to produce an appearance of resemblance in words which are not in reality cognate.

CHAPTER I.

Preliminary survey of the forms of words and the permutations of letters.

SECTION I. Introductory Remarks.

IN order to display, in its real extent, the affinity which subsists between the Celtic dialects and other languages, it will be necessary to compare them in two different points of view, and to examine, in the first place, the relations between their respective vocabularies or stocks of primitive words or roots, and secondly, the peculiarities and coincidences in their grammatical structure. But before we enter into details which properly belong to either of these subjects, we must consider some general principles of inflection, which have an important influence on the structure of words and sentences in several of the languages to be examined.



SECTION II.

Of the permutation of letters in composition and construction—
Of Sandhi and Samasa in Sanskrit—Of the same principles as discovered in the Celtic dialects—in the Welsh—in the Erse—Of the digamma and sibilant in Greek.

It is a habit common to many of the Indo-European languages to interchange certain letters according to rules founded originally on euphony, or on the facility of utterance; and from this circumstance arises the great capability, which these languages possess, of composition, or the formation of compound words. The substitution of consonants of particular orders for their cognates, which takes

place in Greek in the composition of words, and in some other instances, is an example of this peculiarity.

In Greek, in Latin, and in the German dialects, the mutation of consonants is confined to words brought together under very peculiar circumstances, as chiefly when they enter into the formation of compound terms, and it is scarcely observed in words which still remain distinct, and are merely constituent parts of sentences. Either the attention to euphony and the ease of utterance has not extended so far, or the purpose was attained by a choice of collocation, the words themselves remaining unaltered. But in the Sanskrit language words merely in sequence have an influence upon each other in the change of terminations, and sometimes of initial letters, on the principle above alluded to. Thus, instead of *atishtat manujah*, *stabat homo*, the man stood, we find the words written *atishtan manujah*, the final *t* of the verb *atishtat*, *stabat*, being altered into *n* on account of the liquid consonant with which the next word begins. This change in distinct words is termed by the Sanskrit grammarians संधि, Sandhi, conjunction; but the laws according to which compound words are formed, and which have a similar reference to euphony, are designated समास, Samāsa, coalition. This last process is to be observed in most, if not in all the European languages, and the rules which govern it in all instances are very similar; but the alteration of consonants in entire words, according to the rules of Sandhi, have been considered as in a great measure peculiar to the Sanskrit. It is, however, a remarkable fact, that in the Celtic dialects, and more

especially in the Welsh, permutations in many respects analogous to those of Sandhi are constant and indispensable in the formation of sentences. It is impossible to bring three or four words together in the Celtic languages, without modifications similar in their principle to those of Sandhi.

The general principle of these changes in Sanskrit may be understood by the following table of consonants, arranged according to the organs by means of which they are pronounced, and likewise according to the intensity and mode of utterance. The former arrangement is analogous in some respects to that of the Greek mutes, but more numerous and comprehensive. It consists of five classes, termed Guttural, Palatine, Lingual, Dental, and Labial. To these is added a sixth, consisting of semivowels; and a seventh, containing Sibilants and an Aspirate, which is associated with the Sibilants. The second division is into two orders termed Surds and Sonants.

	SURDS.			SONANTS.		
Gutturals	K	K'h	G	G'h	Ng.	
Palatines	Ch	Ch'h	J	J'h	Gn.	
Linguals	T	T'h	D	D'h	N.	
Dentals	T	T'h	D	D'h	N.	
Labials	P	P'h	B	B'h	M.	
Semivowels			Y — R — L — V.			
Sibilants	Ś	Sh	S	H		

The vowels are included
among the Sonants.

The laws of Sandhi forbid the meeting of consonants of different orders. Hence a Surd consonant at the end of a word is changed with the corresponding sonant, if the next word begins with a so-

nant; and sonants are changed into surds if the following words begin with surds.

Nearly of the same description are the mutations of consonants in the Celtic language; but in order to obtain a view of the whole system of these changes, it is necessary to compare several dialects, as there is not one which preserves them all in an entire state. The Welsh alphabet has them, however, in greater variety than the others. In this all mute consonants of the order termed above surds have four forms, and those which correspond with the sonants have three. The semivowels or liquids have two. The sibilant letter had probably its mutation into the aspirate, but this is lost in Welsh, though preserved, as we shall see, in the Erse.

First order, the primitive letters being surds.

	First form, Sharp.	Second form, Obtuse.	Third form, Aspirate.	Fourth form, Liquid.
Gutturals	c	g	ch	ngh
Dentals	t	d	th	nh
Labials	p	b	ph	mh

Second order, in which the primitives are sonants. These have two changes.

	Primitive.	Obtuse.	Liquid.
Gutturals	g	initial omitted	ng
Dentals	d	dh or Saxon þ	n
Labials	b	v	m

Third order, Liquids. These have one change.

lh (corresponding with the surd lh or lr of the Vedas.)	l
m	v
rh	r

Of the mutations of consonants in the Erse or Gaelic.

In the Erse dialect of the Celtic language the mutations of consonants are not so varied. Each consonant appears in two forms only, which are termed the plain and the aspirated. But the aspirated forms in the Erse are often the obtuse forms in Welsh, the aspiration being deceptive, and arising from the imperfect orthography adopted in this language. The addition of *h* to the primitive consonant serves only to render it obtuse, or in other instances to obliterate it. On this account I shall set down the table of consonants, with one column for the obtuse letters as usually spelled, and another indicating their pronunciation, which is in general similar to that of the obtuse forms in Welsh.

	Plain or primitive form.	Secondary form as spelled.	Secondary form as articulated.
Gutturals	C or K	Ch	X aspirate or Kh }
	G hard	Gh	
Dentals	T	Th	H
	D	Dh	
Labials	P	Ph	F
	B	Bh	V
	M	Mh	V
	F	Fh or H	H
Liquids	L (like Welsh Lh)	L	L plain
	N	Ñ	
	R (like Rh)	Ř	
Sibilants	S	Sh	} or H H
		Ś	

It is to be observed that H never stands as the initial of a word in Erse in the primitive form, or

is never in fact an independent radical letter. It is merely a secondary form or representative of some other initial, viz. F or S. It must likewise be noticed, that the same words which begin with S or F as their primitive initial in the Erse, taking H in their secondary form, have in Welsh H as their primitive initial. This fact affords an instance exactly parallel to the substitution in Greek of the rough and soft breathings for the Æolic digamma, and in other words for the sigma. *Οἶνον*, as it is well known, stands for *φοῖνον*, *Ἑσπερος* for *φέσπερος*, and *ἐπὶ* probably replaced a more ancient form of the same word, viz. *σεπὶ*; *ἕξ* stands for *σὲξ*, *ῥς* and *ῥρω* for *σῶς* and *σέρπω*. These instances might lead us to suppose, as Edward Lhuyd has long ago observed, that the Greek language had originally a regular mutation of initial consonants, similar to that of the Celtic, though it was lost, except in these instances, or rather, as pointed out by these vestiges, previously to the invention of letters.

It is necessary to explain somewhat more fully the nature of these mutations of consonants in the Celtic language, and this can only be done by pointing out the circumstances under which they take place. The following examples are from the Welsh.

1. Words of four initials.

Gutturals.

Câr, a kinsman.

1. form *Câr agos*, a near kinsman.
2. form *Ei gân*, his kinsman.
3. form *Ei châr*, her kinsman.
4. form *Vy nghâr*, my kinsman.

Dentals.

Tâd, a father.

1. form, Tâd y plentyn, the child's father.
2. form, Ei dâd, his father.
3. form, Ei thâd, her father.
4. form, Vy nhâd, my father.

Labials.

Pen, a head.

1. form, Pen gŵr, the head of a man.
2. form, Ei ben, his head.
3. form, Ei phen, her head.
4. form, Vy mhen, my head.

2. Words of three initials.

Gutturals.

Gwâs, a servant.

1. form, Gwâs fydhlon, a faithful servant.
2. form, Ei wâs, his servant.
3. form, Vy ngwâs, my servant.

Dentals.

Duw, a god.

1. form, Duw trugarog, a merciful god.
2. form, Ei dhuw, his god.
3. form, Vy nuw, my god.

Labials.

Bara, bread.

1. form, Bara cann, white bread.
2. form, Ei vara, his bread.
3. form, Vy mara, my bread.

3. Words of two initials, viz. liquids and sibilants.

Lhaw, a hand.

1. form, Lhaw wenn, a white hand.
2. form, Ei law, his hand.

Mam, a mother.

1. form Mam dirion, a tender mother.

2. form Ei vam, his mother.

Rhwyd, a net.

1. form Rhwyd lawn, a full net.

2. form Ei rwyd, his net.

As the sibilant has no similar inflexion in Welsh, I must take an example from the Erse.

Súil^a, an eye.

1. form Súil.

2. form a húil, his eye.

Sláinte, health.

2. form Do hláinte, your health.

N. B. F has the same mutation.

Words beginning with vowels in Welsh are subject to changes similar to those belonging to the form Guna in Sanskrit. They also take the aspirate after words which cause the consonants to be aspirated.

In Welsh composition these changes in the initial consonants take place more frequently in reference to the sense of words and the rules of grammatical construction, and without any respect to the principle of euphony which governs the Sandhi in Sanskrit. But there are a great many similar changes in Welsh, for which no other reason can be assigned than some real or fancied advantage in respect to

^a In these instances the initial *s*, though converted into an aspirate in pronunciation, is sometimes retained in orthography, either with a dot over it, or followed by *h*. But in either case the sibilant is entirely lost. There seems to be no precise rule of orthography in this instance.

sound or the facility of utterance. It must likewise be observed, that in some instances changes are induced in the terminating consonants of preceding words, as well as in the initials of succeeding ones.

In the influence which some of the numerals have on other words examples may be found tending to illustrate these remarks.

Un makes no change in the following noun; as
un gwr, one man.

Tri and chwech change the initials into the corresponding aspirates; as

tri châr, for tri câr.

chwech châr, or chwe châr.

Dêg, ten, before *blynedh*, years, changes not only the initial of the following word into its corresponding liquid, but likewise its own final consonant into the liquid analogous to it. Thus instead of

dêg blynedh,

we read

dêng mlynedh, ten years;

and instead of

pump blynedh,

we find

pum mlynedh, five years.

In like manner, when the preposition yn is prefixed to a noun, it not only changes the initial of the following noun on the same principle of euphony, or ease of pronunciation, but is likewise itself changed. Thus for

yn canol, we read yng nghanol,

yn pen ——— ym mhen,

yn tŷ ——— yn nhŷ,

yn bara ——— ym mara,

yn gŵr ——— yng ngŵr.

The changes above described are in a great measure analogous to those which have been pointed out as taking place in Sanskrit, except that the latter affect principally, though by no means exclusively, the terminations of words.

SECTION III.

Of the interchange of particular letters between different languages—Table of numerals—Observations deduced from it.

There is another comparison of corresponding consonants and vowels, or of letters frequently and habitually interchanged, which it is necessary to take into consideration, before we can proceed with advantage in examining the analogies which exist between languages of the same stock. I refer to the phenomena which relate to the interchange of particular letters in the derivation of words from one dialect into another, or in deducing them into both from a common original, and to facts which prove that these changes take place according to certain rules, and not by a merely accidental variation or corruption.

In order to ascertain the rules which govern this system of changes it is necessary to proceed with great caution. The vague conjectures in which writers upon etymology have too frequently indulged, have brought ridicule and contempt upon the legitimate pursuits of the philologist, and upon the philosophical study of languages, and have induced some persons to entertain doubt, whether it is possible to deduce from this quarter any historical conclusions of importance, either as to the deriva-

tion of languages themselves, or of the tribes of people who are found to use them. As an introduction to what may be stated on this subject, I lay before my readers a comparison of the cardinal numbers in several Indo-European languages. It will be apparent on a very superficial glance, that the words expressing these numerals in all the dialects mentioned are derived from one origin, though variously modified; and a survey of these modifications will shew the particular changes which words and the elements of words assume in the respective languages.

Sanskrit.	Persian.	Russian.	Latin.	Erse.	Welsh.	Greek.	Mæso-Gothic.	Old High German.
— aika	یک—	odin'	unus, a, um	aen	un	εἷς, μία, ἕν	ains, aina, ain	ein
— dwi } — dwau }	دو—	dva } dvie }	duo, duae, } i. e. duai }	da } do }	dau } dwy }	δύο, δύο	twai, twos, twa	tue
— tri	سه—	tri	tres } tria }	tri	tri } tair }	τρεις, i. e. } τρεις } τρεῖς }	thrins	thri
— chatur	چهار—	chetyre	quatuor, } petor, } Oscan. }	keathair	pedwar, } pedair, }	πέντε, } πέντε, } πέντε }	fidwor	fiuar
— pancha	پنج—	pyat	quinque	kuig	pump	πέντε } πέντε }	fimf	finfe
— shash	شش—	shesh'	sex	se	chwech	ἕξ	saihs	sehs
— septan	هفت—	sem	septem	secht	saith	ἑπτά	sibun	sibun
— ashta	هشت—	osm } vosem }	octo	ocht	wyth	ὀκτώ	ahtan	ohto
— navan	نه—	devyat'	novem	noi	naw	ἐννέα	nihun	niguni
— dashan	ده—	desyat'	decem	deich	dég	δέκα	tailhun	tehan
— vingshati	بیست—	dvatzat'	viginti	fichid	ugain	ἑκατόν, } ἑκατόν (?) }	twaimtigum	tuengt
— tringshat	سی—	tritizat'	triginta	deich ar } hiehid }	dég ar } ugain }	τριακόνα	thrinstigum	thritting
— shatum	صد—	sto	centum	kett	cant	ἑκατόν	hund	hant

A very slight inspection of these tables will be sufficient to convince any person that nearly all the words contained in them are derived by each language from some of its cognates, or by all from a common source. It is therefore allowable to make them a subject of examination, from which the peculiarities of each dialect may, so far as such a specimen can extend, be discovered.

It is easy to observe that certain consonants, or certain classes of consonants in one language, are almost uniformly substitutes for certain others in a different language; and although this observation can here be made only on a confined scale from so small a specimen of the vocabulary, it may be sufficient for furnishing suggestions which will be amply established from other materials.

One of the most striking facts that appears on comparing these lists of numerals is, that in some of the languages of western Europe guttural or hard palatine consonants abound, and take the place of the sibilants, soft palatines, and dentals, and even of the labial consonants, which are found in the more eastern and in some northern languages. Thus

$$\left. \begin{array}{l} \text{श—sh} \\ \text{स—s} \\ \text{ष—sh} \\ \text{प—p} \\ \pi \\ \tau \end{array} \right\} \text{are converted into } \left\{ \begin{array}{l} \text{c, i. e. k} \\ \text{q} \\ \text{g} \\ \text{ch, i. e. } \chi \\ \kappa. \end{array} \right.$$

The following examples prove this remark:

Numeral 4.

chatur, Sansk.	}	ch	} become {	{ q, quatuor, Lat. k, keathair, Erse		
chetyre, Russ.						
chehar, Pers.						
τέτταρες, Gr.	}	τ				
πίσυρες,		π				
pedwar, Welsh	}	p				
petor, Oscan.						
fidwor, Goth.	}	f				
fiuuar, Teut.						

Numeral 5.

pancha, Sansk.	p & ch	} become {	q and q, quinque, Lat. k and g, kuig, Erse
penj, Pers.	p & j		
πέντε, Gr.	π & τ		
πέμπε, Gr.	π & π		
pump, Welsh	p & p		
fimf, Goth.	f & f		

Numeral 6.

shash, Sans.	sh & sh	} become {	ch & ch } guttural } (') and ξ, ῥξ, Greek	chwech, Welsh
shesh, Pers.	sh & sh			
sex, Lat.	s & x			
saihs, Goth.	s & s			

Numeral 7.

saptan, Sansk.	s & pt	} become {	s and cht,	Erse
septem, Lat.	s & pt		h and ft,	Pers.
saith, Welsh	s & th		(') and πτ,	Greek

Numeral 8.

ashtan, Sansk.	sht	} become {	cht ocht,	Erse
hesht, Pers.	sht		κτ ὀκτώ,	Greek
wyth, Welsh	th		ct octo,	Lat.
			ht ahtan,	Goth.

Numeral 10.

dashan, Sansk.	sh	becomes	{ κ δέκα,	Greek
			{ c decem,	Lat.
			{ ch deich,	Erse
			{ g dêg,	Welsh
			{ h tehan,	Teut.
			{ h taihun,	Goth.

Numeral 20.

vinshati, Sansk.	sh	becomes	{ g viginti,	Lat.
			{ g ugain,	Welsh
			{ κ εἴκοσι ^a ,	Greek
			{ ch fichid,	Erse

Numeral 30.

trinshat, Sansk.	sh	becomes	{ κ τριάκοντα,	Greek
			{ g triginta,	Lat.

Numeral 100.

shatum, Sansk. sad, Pers.	sh s	} become	κ ἑκατὸν,	Greek
			c centum,	Lat.
			c cant,	Welsh
			k kett,	Erse
			h hunt,	Goth.

The preceding facts suggest the following observations.

The Sanskrit and some other languages holding a near relation to it in the forms of words abound in sibilants and soft palatine consonants. They have these letters in several instances, in which cognate words in other languages have in the place of them gutturals, or hard palatines, or dentals.

^a εἴκοσι was probably *φείκοντι*.

The Greek substitutes for the sibilants and soft palatines of the Sanskrit, chiefly the *tenues* of the hard palatine or guttural class and of the dental, viz. κ and τ . In several instances the Greek, particularly the Æolic, has π in the place of the Sanskrit soft palatine, or च—ch; as in πέμπε for pancha, πέσυρα (πέτυρα?) for chatur.

The Welsh makes nearly the same substitutions as the Æolic Greek. It puts p for the soft palatine ch in the instances before mentioned. It substitutes more generally hard palatines or gutturals (either c, i. e. k,) or ch for the soft palatines and sibilants of Sanskrit. It has the aspirate guttural ch instead of the aspirate sibilant sh. It has *th* in the place of *et* and *pt*.

The Erse substitutes for the sibilants and soft palatines of the Sanskrit, gutturals, as the hard c or k, as also in some instances the guttural aspirate ch.

The Latin displays nearly the same phenomena as the Erse. It puts c or q, equivalent to k, in the places of the letters above mentioned. Neither the Erse nor the Latin adopts the p of the Welsh and Æolic Greek, but they have c or q instead of it, as in other instances where the Sanskrit has ch—च.

The Gothic and other Teutonic dialects resemble the Welsh and the Æolic Greek, except in the circumstance that they prefer aspirate consonants, as finfe for πέμπε or pump, fidwor for pedwar, or πέτυρ, thri for tri. They likewise substitute the simple h in the place of palatines and sibilants in other languages, as may be seen in a variety of instances, as in the numerals, 6, 8, 9, 10, 100. The Persic and

the Greek languages use the aspirate in some instances in a similar manner.

We are not yet prepared for entering on a comparison of the vowels and diphthongs as they are related to each other in these cognate languages.

CHAPTER II.

Further proofs and extension of the observations laid down in the preceding chapter.

SECTION I. Introductory Remarks.

THE changes which I have pointed out in the preceding section between particular consonants in the derivation of words from one language to another, appear, in some instances, so unlikely, and the analogy, if any, in pronunciation is so remote, that many of my readers may be disposed to regard the examples on which I have founded my remarks as a mere result of accidental coincidence. These changes are, notwithstanding, regular and systematic. I shall not attempt to account for them, or to say how they took place, but they are accordant with observations which may be traced to a great extent in the comparison of kindred languages. As I cannot, however, expect that any person should be convinced of this fact on my assertion, I shall here adduce some further evidence.



SECTION II.

Of the interchange of palatine or guttural consonants with labials in the different languages.

The interchange of cognate letters, both mutes and liquids^a, is a thing familiar to every body, but

^a The cognate mutes are

t,	d,	th.
k,	g,	ch.
p,	b,	ph.

the permutation of palatines into labials appears much more improbable. We have observed that this interchange has taken place in several instances in the numerals of Indo-European languages. Great as the difference is between such elements of articulation as *k* and *p*, we find them to stand as representatives for each other even in two different dialects of the same language. Some dialects of the Greek language afford a well-known exemplification of this remark. The Ionians and Æolians inserted *κάππα* in a variety of words, instead of *πί*, used in the other Grecian dialects. This remark has been made by many of the scholiasts and old grammarians, and more fully by Vossius^b, who says, “*Iones in interrogativis et relativis mutant π in κ. Ita κῶς dicunt pro πῶς; ὁκῶς pro ὀπῶς; κῆ pro πῆ; πόσος, κόσος; ὀπόσος, ὁκόσος; ποῖος, κοῖος; ὀποῖος, ὁκοῖος; πότε, κότε; ὀπότε, ὁκότε. Græcis quoque κύαμος est faba. Æoles quoque uti κ pro π testatur Etymologici auctor in κοῖος. Sic Latini jecur a Gr. ἥπαρ, et scintilla, quasi spintilla, a σπινθήρ.*”

The same writer has adduced other instances in which this interchange has taken place between the Greek and Latin.

Lupus.	λύκος.
Sepes.	σήκος.
Spolia.	σκῦλα.
Vespas.	σφηκάς.

Cognate liquids or semivowels are in many languages the following.

l, r, v.

^a Gerard. Joh. Vossii de Litterarum permutatione Tractatus, Etymol. Ling. Lat. prefix. p. 24. ed. Neap. 1762.

“ Maxime tamen locum id habet in iis vocibus,
 “ in quibus juxta Ionicæ et Æolicæ dialecti proprie-
 “ tatem, π transiit in κ.

Equus ab Æolico ἵκκος pro ἵππος.

Inquo ab Æolico ἐνέκω — Gr. ἐνέπω.

Linguo ab Æolico λείκω — Gr. λείπω vel a λείπω,
 λιμπάνω.

Quâ ab Ion. κῆ pro Gr. πῆ.

Quatuor a πέττορα, κέττορα.

Quinque a πέντε, πέμπε, κένκε.

Quis a τίς, κίς.

Quoties ab Ionice κότε, Gr. πότε.

Quotus a κότος, pro πότος.

Sequor ab ἔκομαι pro ἔπομαι^c.

The learned Edward Lhuyd has observed that a similar interchange of p and k takes place regularly between the Welsh and Erse dialects of the Celtic language. I shall cite his words and the evidence he adduces for this remark.

“ It is very remarkable that there are scarce any
 “ words in the Irish, besides what are borrowed
 “ from the Latin, or some other language, that be-
 “ gin with p; insomuch that in an ancient alpha-
 “ betic vocabulary I have by me that letter is
 “ omitted; and it is no less observable that a consi-
 “ derable number of those words, whose initial letter
 “ in the British language is a p, begin in the Irish
 “ with a k, or, as they constantly write it, with a c.
 “ This partly appears by the following examples :

Paul, W.	a pole or stake,	Kûal, Ir.
Pêth,	{ a thing, part, share, }	Kod, Koda,
	{ some, }	Kûyd.

^c Voss. ubi sup. p. 24.

Pâ ?	what ?	Kâ ?
Pâsk,	Easter,	Kâsg.
Pencas, Corn.	Whitsuntide,	Kaikis.
Peiswin, W.	chaff,	Kaithsloan.
Pesuch,	a cough,	Kasachd.
Pen,	a head,	Keann.
Puy,	who ?	Kîa ?
Pûylh,	sense or meaning,	Kîal.
Plant,	children,	{ Klann, and Kland.
Plÿv,	feathers,	Klÿv.
Peduar,	four,	Kathair.
Pymp,	five,	Kûig.
Pair,	a furnace or cauldron,	Kuir & Koire.
Pren,	a ton,	Kran.
Pâr,	a couple,	Koraid.
Prîdh,	earth or clay,	Krîadh.
Praidh,	a prey,	Kreach.
Pa raid,	wherefore,	K'red.
Prÿv,	a worm,	Krûv.
Pob,	every,	Ceach or Gach.

And sometimes in other parts of the words we find the same : as

Yspÿdhad,	a hawthorn,	Skîathach,
Mâp or Mâb,	a son,	Mak.

The preceding examples are quite sufficient to establish the fact asserted in the present section. We shall hereafter find the application of this remark.

SECTION III.

Of the interchange of sibilant and soft palatine consonants with gutturals or hard palatines.

It has been customary in many languages, and in our own among others, to soften the guttural or hard palatine letters, or to interchange them with other elements of pronunciation which are termed sibilants and soft palatines. We substitute the ordinary ch in the place of the hard c, or the k of other cognate languages, and say church for kirk or kirche. The Italians pronounce Tschitschero, a name which the Greeks wrote *Κικέρων*. Secondly, many nations are in the habit of softening the g, and giving it the pronunciation of our j, as we are accustomed to do when this consonant comes before the vowels e and i. Thirdly, we shall find some languages converting the guttural aspirate χ or ch into sh, as the Welsh substitute chwech for the Sanskrit shash.

It will illustrate the two former of these changes to observe that the Sanskrit च—ch^d is interchangeable in the regular inflexions of that language for क—k, and ज—j likewise for ग—g. Thus, verbs beginning with k, in the reduplication of the initial, which in Sanskrit as in Greek is a character of the preterperfect tense, substitute ch for k, and verbs beginning with g substitute j for that consonant. The following are examples.

Root.	Present.	Preterperfect.
कृ kri, (to make)	करोति, karoti	चकार, chakara.
गै goi, (to sing)	गायति, gayati	जगौ, jagau.

^d Ch, as in cherry.

We cannot find a parallel fact in the Sanskrit language for the third remark, which respects the interchange of the aspirate sibilant for the aspirate guttural, because the Sanskrit has no consonant analogous to the Greek $\chi\tilde{i}$ or the Welsh *ch*.

The preceding remarks will be more perspicuous if we place these changes in a tabular form, as follows :

क, k, or c, or q—	interchanged for च, ch.
_____	sometimes for श sh, ष sh, or स s.
ग g, _____	for ज j.
$\chi\tilde{i}$ or ch aspirate guttural,	for श sh, ष sh, or स s.

It must be observed that the Greek $\Xi\tilde{i}$ and $Z\tilde{\eta}\tau\alpha$ are to be included in many instances among the palatine letters, and fall under the same rules of permutation. $\Xi\tilde{i}$ is sometimes represented in Sanskrit by क्ष ksh, but frequently by the simple character corresponding with sh. $Z\tilde{\eta}\tau\alpha$, when it is the characteristic of verbs making the future in $\xi\omega$, may properly be considered as a palatine letter, and it will be found represented in Sanskrit by palatine consonants.

I shall exemplify these remarks by some lists of words in addition to those instances already discovered among the numerals, in which the above-mentioned interchanges occur. The first series contains examples of soft palatines in one language and hard palatines or gutturals in another ; the second, cases in which j is substituted for hard g, and the third, words in which sibilants appear in the place of gutturals or hard palatines.

I. Words in which च—ch or ch soft is interchanged with hard palatine letters.

Words having च ch or ch soft.	Words having hard palatines.
च cha, and, subjoined } to the noun,	καὶ, Gr. que, Lat.
chatur,	quatuor.
lōcha,	look, Eng.
lochatai, } λεύσσει, }	looketh.
lochayati,	lucet, Lat.
lochan, (an eye)	lhygad, i. e. lhugad, W.
vāchās,	voces, Lat.
vachati, or } vakti, }	βάζει, i. e. βάκει, unde βάξις.
chyōtati,	χέυεται, χέεται.
richch'hati, S. } reacheth, Eng. }	{ ὀρέγεται. { erreicht, Germ.
uchcha and } uchchah, }	{ uch, uchel, W. { hoch, Germ.
uchchatā, (arrogance)	uchad, W. (act of rising.)
church,	κυριακὴ, kirche, &c.

II. The following are examples of j or ज in Sanskrit supplying the place of γ or g in Greek and other European words.

Sanskrit.	European languages.
jānuh,	genu, γόνυ, knee.
jānus, (birth,)	γόνος.
jāni,	γυνή.
jarami,	γέρημι, I grow old.
jāran,	γέρων.
jāراتि,	γραῦς.

jarjati,	jurgat.
jāgaras,	ἐγρήγορος.
jātus,	begotten, γέτης.
taijātai, he sharpens.	θήγεται,
ajah,	αἴγα, goat.
rājām,	regem.

III. Instances of sibilant consonants interchanged for gutturals^e.

Sibilants.	Gutturals.
drésh, root.	δέρκειν.
dādārshā,	δέδορκα.
dansh, root,	δάκνειν.
danshati,	δάκνει.
mishrayatai,	μίσσεται.
mishrum,	mixtum,
ashwah or ěshuus	{ equus.
asb, (Persian)	
shwashurum,	{ each, (Erse)
shwashrus,	socerum.
pashus,	socrus.
swasaram,	pecus.
sororem,	{ khauhir, Pers.
schwester, Germ.	
suir, Erse	
sister,	
δρόσος,	druchd, (Erse.)
seta, Lat.	χαίτη.
	kaishah, Sansk.
suess, Germ. Sweet,	chwys, W.
silex, Lat.	χάλιξ.
schwan, Germ. Swan,	κύκνος.

^e The words in the left hand columns not otherwise specified, and neither English, nor Latin or Greek, are Sanskrit.

short, Eng.	curtus, court.
chien, French.	canis.
sus, Lat. }	{ khūk, Pers.
ṡs, Gr. }	{ hwch, Welsh.

SECTION IV.

Of the relations of the aspirate.—Of the substitution of the aspirate in several languages for S and for F.—Of the aspirate as a guttural or hard palatine.

The state of Greek words beginning with the aspirate, or with the digamma, has long been an object of attention among grammarians. Some of the facts connected with this subject are capable of elucidation by a reference to the laws of the Celtic language.

It was observed by Edward Lhuyd, that H is never the first or proper initial of any word in the Erse language, but that words beginning with F or with S change that initial according to the laws of permutation peculiar to this dialect of the Celtic into H. Hence he infers with probability, that in the primitive form of these words they began with F or S, and that cognate words which begin with H in other languages have lost their proper initial. In like manner some Greek words now beginning with an aspirate have lost an original digamma, while others, as *ἐπτά* and *ἑξ*, corresponding with *septem* and *sex* in Latin, and with *sapta* and *shash* in Sanskrit, have in all probability lost an initial *S*^a.

^a Lhuyd remarks with great probability, that such phenomena indicate the former existence of a system of permutation in other languages, similar to that which is still preserved in the Celtic dialects.

The following words, collected by Lhuyd, are cognate in the Welsh and Erse languages. In the Erse they begin with S in their primitive form, and with H in a secondary form, or *in regimine*. In Welsh they have only one beginning, with H. I add a third column to shew the correspondences presented by other languages, or merely to point out the meaning.

Erse.	Welsh.	Other languages.	Meaning.
sailleôg or haileôg	helig	salix L.	willow.
salan or halan	halen	sal, ἅλς	salt.
saïlte or hailte	hâlht	salitus	salted.
saith or haith	haid		swarm.
saith or haith	hûth		thrust.
sâv or hâv	hâv		summer.
savail or havail	havail	similis	like.
skoiltea	holht		cleft.
se	e		he.
seavak	hebog		hawk.
sealv	helva		herd.
sealva	helu		possession.
sealga	hela		hunting.
sealgaire	helliwr		hunter.
sean	hên	senex	old.
seasg	hêsg	sedge and hedge.	
seile	haliu	saliva.	
seôl	hûyl	a sail.	
si	hi	sie, she.	
sin	hyn		this.
sîth	hedh and hedhwch }		peace.
sîl	hîl		seed.
sîr	hîr		long.
soinean	hinon		{ fair wea- ther.
sûan	hÿn	somnus, ὕπνος,	

Sometimes the H in Welsh is lost, as in

sêgh	ych	ox	
suas	yuch	super, ὑπέρ.	
silastar	elestyr		flag.

It would be easy to point out numerous instances of a parallel description, in which words beginning in Greek with the aspirate have in Latin and other languages either S or the F—V^b. The following are examples chiefly from Vossius.

1. Aspirate substituted for S^c.

ῥς,	sus.
ῥρω,	serpo.
ᾶλς,	sal.
ᾶλλομαι,	salis.
ᾶγιος,	sacer.
ᾶρρω,	sarpo.
ᾶλις,	satis.
ἔ,	se.
ἐκάς,	secus.
ἔδος,	sedes.
ἥμισυ,	semis.
ἔπεσθαι,	sequi.
εἰρμός,	sermo. Scaliger.
ἐρπύλλον,	{ serpyllum. Servius in Eclog. 2.
ἔξις,	sexus. Festus.
ὁμαλός,	similis.
ἵστω, ἵστημι,	sisto.
ἐκυρός,	socer.

^b Grimm's Deutsche Grammatik, p. 583.

^c Lacones, Argivi, Pamphylii et Eretrienses Σ eximere solent atque aspirationem ejus loco sufficere; ita μούσα iis est μῶα: μουσική, μωϊκά; πᾶσα, πᾶα; βουσά, βοῦσά: ποιῆσαι, ποιῆαι, &c. Voss. vid. Prisc. L. V. Lhuyd, p. 30.

ἐκυρά,	socrus.
ὄλος, ὄλον,	solus,
ὑπαρ,	sopor.
ὑραξ,	sorex.
ἰδρῶς, and ὕδωρ,	sudor.
οὔ,	sui.
ὄλκος,	sulcus.
ὑπό,	sub.
ὑπέρ,	super.
ἐπτά,	septem.
ἕξ,	sex.
ὑπέρβιος,	superbus.
ὑπιος,	supinus.
ἐός,	suus.
ὕλη,	sylva.

2. Instances of the rough aspirate substituted for
F or V^d.

ἐσπέρα,	vespera.
εἶλω,	volvo.
Ἑνετός,	Venetus,
Ἑλία,	{ Velia. Serv. ad Æneid. l. 359.
ἐστιᾶν,	festum.
ὀμιλία,	familia.
ἄρμοϊ,	ferme. Scaliger.
ἔρμα and } εἰρμός,	firmus.

In other instances the Greek language seems even to have lost the spiritus asper, and pronounces such words with the gentle aspiration^e, as in the following.

^d Chiefly from G. I. Vossius, ubi supra.

^e Grimm, th. i. p. 587.

ἄλδος, Dorice, pro ἄλσος,	saltus.
ἔπω,	sequo, dico.
εἶ,	si.
ἄνευ,	sine.
ἀνέω, ἀνῶ,	sino.
ἀριστερὸς,	sinister.
ὀρφέω, v. ῥοφέω,	sorbeo.

In these instances the spiritus lenis stands, where probably the spiritus asper once stood, for an original S. In the following, the digamma was originally the initial letter :

ἔαρ,	ver.
ἴδμεν,	{ videmus, Sansk. vidmus,
	{ scimus.
ἀλώπηξ,	vulpes.
ἰταλὸς,	vitulus.

Perhaps we may trace the effect of a similar disposition to soften and obliterate the initial S in the following words beginning with consonants.

γλάφω,	scalpo.
γράφω,	scribo,
γλύφω,	sculpo.

H representing a hard palatine or guttural consonant in the Teutonic languages.

In the foregoing paragraph it has been shewn, that the rough aspirate or H represents in several of the Indo-European languages, a sibilant, or the digamma or *vau*. Thus the Welsh, as well as the Greek language, drops the S or the F entirely, and substitutes the aspirate in words which originally had either S or F for their initial, or which appear

to have had one of them, as far as can be judged from the cognate languages: while in the Erse the aspirate is still used as a regular inflection of words properly beginning, and yet often retaining the original S or F. I shall now shew, that in the Latin as well as in the Teutonic languages, H is the substitute for, or is to be considered as, a radical hard palatine or guttural. It stands for k, g, or ch.

In the following words H in Latin seems to be a substitute for the Greek X^f.

hiems,	χεῖμος.
halo,	χαλῶ.
hara,	χοῖρος.
heri, olim hesi,	χεςι, unde χθές.
hio, hisco,	χάω, χάσκω.
hir,	χεῖρ.
hirundo,	χελιδών.
hortus,	χόρτος.
humi,	χαμαί.
humilis,	χαμαλός.
humor,	χυμός.
veho,	φοχῶ.

In the following instances the Teutonic languages substitute H for a palatine in Greek and Latin words^g.

claudus,	halts, halz, halt, (lame.)
κάνναβις,	hanpr, hanaf, hemp.
caput,	haubith, houbith, haupt
καρδία, cor,	haerto, herza, heart.

^f G. I. Vossius, ubi supra.

^g The list is taken from Dr. Jacob Grimm's Deutsche Grammatik. The Teutonic words are Mæso-Gothic, Old High German, and English.

κυν, canis,	hunths, hund, hound.
κοῖλος,	hol, hole, hollow.
celare,	hilan, hēln.
κάλαμος, calamus,	halam, halm,
κάρτος, καρτερὸς,	hardus, hart.
cornu,	haúrn, horn.
collum,	hals.
κρυμὸς,	hrîm, rhyme, (old Norse.)
κλαίειν,	hlahan. (Goth.)
κράζειν,	hrakjan. (Goth.)
κλέπτῃς,	hleptus. (Goth.)
lux, (i. e. luks,)	liuhad, light, licht,
οἶκος,	veihs, (Goth.) house.
tacere,	thahan, dagen.
socer,	svaihra. (Goth.)

In Sanskrit we often find ङ—H, corresponding to the Γ in Greek words.

māha,	μέγα.
ahan, or ēhon,	ἐγών.

SECTION V.

Of the interchange of dental and sibilant letters.

In a variety of languages, either for the sake of euphony, or from caprice or accident, sibilant letters have been interchanged with dentals. The conversion of the Greek sigma into tau is familiar to all classical readers. The use of the double ττ instead of the double σσ is said to have been introduced in Athens by Pericles, but it probably preexisted as a custom somewhere, otherwise it would have been too great an innovation. It was probably a Bœotian habit, for the Bœotians said *συρίττειν* instead of

συρίζειν, or the Æolian συρίσσειν, and ὀπλίττω for ὀπλίζω. The interchange of σσ and ζ for ττ is a well known dialectic variety in the Greek language. The single τ was also put for σ by the Æolians and Dorians, as

φατὶ, δίδωτι, ἔπετον, ποτειδᾶν,	}	for	φασὶ. δίδωσι. ἔπεσον. ποσειδᾶν.
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The late Attics adopted this custom, and said τήμερον, μέταυλος, for σήμερον, μέσανυλος ^a.

In the Teutonic languages the frequent use of s and z in the one class, and of t by the other, has always been a characteristic distinction of the idioms which belong to the High and Upper German division, and of those allied to the Platt-Deutsch or Lower German dialects. For water in English and Holland-Dutch and Platt-Deutsch, the High-Dutch has wasser; for aut, aus; for sweat, schweiss; for foot, fuss; for sweet, süß; for let, läss. This fact is so well known, that it is superfluous to dwell upon it.

SECTION VI.

Of the substitution of R for S.

The interchange of s and r is very frequent in many Indo-European languages.

Among the Greeks it is said that the Lacedæmonians substituted ρ for σ, and probably other Dorians had the same custom. For ἵππος, ποῦς, θεός, παῖς, they said ἱππορ, πόρ, σίωρ, πόϊρ ^b. The interchange of

^a Matthiæ's Grammar, ed. 1829. p. 34.

^b Ibid. p. 33.

$\rho\sigma$ for $\rho\rho$ was much more frequent; it is, at least, more commonly seen in books, $\rho\sigma$ being peculiar to the Attic dialect.

We learn from Quintilian, Varro, and Festus, that the Romans substituted r in a great many words for s , which had been more anciently used. According to the last mentioned writer the ancients wrote majosibus, meliosibus, lasibus, fesiis, for majoribus, melioribus, laribus, and feriis.

It has been observed, that r is the most recent form in all these instances, and s the most ancient ^c. In the very oldest specimen of Latinity that is extant, and which has been ascribed to the age of Romulus, viz. a hymn of the Fratres Arvales, engraved on a stone which was discovered A. D. 218, are found these words, "Enos Lases juvate," meaning, in all probability, "Nos Lares juvate ^d." It is said, indeed, that the letter r was unknown to the older Latins, who used s instead of it, till the time of Appius Claudius Cæcus, who introduced the r .

The following are examples of the substitution of r for s , in which we can trace both forms in the Latin language.

assus,	arsus.
robur,	robis, unde robustus.
honor,	honor.
arbor,	arbor.
pignora,	pignora.
plurima,	plusima.
holera,	helesa.

} Festus.

^c Grimm's Deutsche Grammatik. Bopp's Conjugationssystem der Sanskritsprache.

^d Lanzi Saggio di Ling. Etrusca, t. i. p. 142. Adelung's Mithridates, th. ii. p. 460.

ara,	asa.	
arena,	asena.	Varro.
carmen,	casmen.	
feriæ,	fesiæ.	} Varro ^d .
lares,	lases.	
erit,	esit.	
Aurelii,	Auseli.	
Furii,	Fusii.	Quintilian.
Papirii,	Papisii.	
Valerii,	Valesii.	} Quintilian.
labor,	labos.	
clamor,	clamos.	
vapor,	vapos.	

The same change may be inferred to have taken place in all words which take *r* in the increment instead of *s* ; as, *acus*, *pecus*, *fœdus*, *pignus*.

The Latins substituted *r* for *s* in other words cognate with the Greek ; as

celer	for	κέλης.
cruor	—	κρύος.

The importance of this observation will hereafter be apparent, when we come to trace the relationship of Latin words with those of other languages. We shall find *r* frequently substituted in the former for an *s* or some equivalent in the Latin, and the resemblance is more decided between such words when we restore the original *s*. Thus *sororem*, perhaps originally *sosorem*, is almost identified with the Sanskrit *swasaram*. The same change of letters has an useful application to the inflections of verbs, as we shall have occasion to observe.

^e Vossius, ubi sup.

SECTION VII.

Of the relation of different vowels and diphthongs to each other in different languages.—Synoptical table of letters interchangeable between different languages.

The vowels are by no means to be discarded in tracing the derivations of words and the relations of languages, as some learned philologists have erroneously maintained. If any proof is necessary of this remark, a very striking and sufficient one may be found in Dr. Jacob Grimm's analysis of the Teutonic verbs.

The first letter of the Sanskrit alphabet, अ, or the akara, which we generally represent by ā, is a short vowel, and, as it has been already observed by Professor Bopp, corresponds in different instances with nearly all the short vowels of the Greek and Latin languages. It is easy to point out many examples in which it occupies the place of the short ě and of the Greek epsilon, and the short ǒ and omicron, as,

dashan, S. δέκα, decem.

ashta, S. ὀκτώ, octo.

It corresponds also very frequently with the Latin ŭ before s or m in the terminations of words. The endings of Sanskrit adjectives and nouns are frequently in (अः) or (अस्) for the masculine, (आ) for the feminine, and (अ or अम्) for the neuter : these are most correctly represented by ah or us or os, ā, and um or on. Thus

shabūs, shubā, shabūm, is

καλός, καλή, καλόν.

Instances may be found in which अ corresponds with other short vowels, but they are not so frequent ; as

āgnis, ignis, fire.

The Sanskrit आ or long ā is most frequently found to occupy the place of ō or ω in Latin and Greek words; as in

dādāmi, διδάμι.

The other Sanskrit vowels, i and u, long and short, correspond with those nearly related to them in sounds; viz. the long and short i or ἰῶτα, and the long and short u or ὑψίλον.

OF DIPHTHONGS.

The semivowels य—ya, and व—va, or wa, and the diphthongs ए—ai, and ऐ—oi, correspond with the Greek and Latin vowels; thus,

य—ya, and ए—ai, with αι Gr. and ē Lat.

व—wa, and ऐ—oi, with ω and ō.

Examples of the former kind occur in the terminations of verbs in the middle and passive voices in Sanskrit and Greek. They are thus:

in Sanskrit.	in Greek.
ai,	μαι.
sai,	αι and σαι.
tai,	ται.

य—ya, is used in Sanskrit where αι occurs in Greek and ē in Latin, in very many cases. One example occurs in the form of verbs having in Sanskrit a future signification, but used in Greek and Latin with a preterite potential sense. Thus from the root Bhu or Fuo, we have

Bhavishyami—fuissem	} related to the Greek form in	{ σαιμι. αις. αι.
—yasi —es		
—yati —et		
व—vā or wā,	वा—vā or wā.	
swānum, S.	sonum. L.	
shwāshurum,	socorum.	

vācham,	vocem.
vākshatai,	av ^h ṣeraś.
swasaram,	sororem.

I shall conclude the foregoing remarks on substitutions or interchanges of letters in different languages by an attempt at a table of correspondences.

Sanskrit.	Persian.	Russian.	Greek.	Latin.	Welsh.	Ere.	Teutonic.
प—p	پ—p	П—p	π,	c, qu p, in the Oscan.	p	k or c	f
भ—bh ध—dh	ب—b د—d	В	φ, β θ	f	bœv	bœbh	f
च—ch id. id.	چ—kh ع—ch	Ч—ch	τ	c, qu	p	k or c	f
ज—j id.	ج—j	Ж—j	σσ, π ξ, ζ γ	c x g	g		th
श—sh id.	ش—s س—s	С—s	κ, χ κ, ξ	c socr	g	ch	k
ष—sh id.	ش—sh خ—h	Ш—sh	κ, χ () ol. f	s, c v, f	ch, guttural h	sœh fœh	h sch, S s h
स—s	س—h		() ol. σ () ol. f	s, c v, f	h gw cr w	sœh fœh	h

CHAPTER III.

Proofs of common origin in the vocabulary of the Celtic and other Indo-European languages.

SECTION I. Names of persons and relations.

IT is now time to examine how far the Celtic and other Indo-European languages are related to each other in their vocabularies, or by the possession of a considerable number of common roots or primitive words. From the comparison to be instituted for this purpose, it is obviously requisite to exclude all such words as from their nature appear likely to have been introduced at a late period by foreign commerce, by conquest, or with the adoption of a new religion or system of manners. I must confine my observations to the original materials of speech, and to expressions which denote simple and primitive ideas.

On entering on this part of my inquiry, I shall take some of the groupes of words collected in the *Amera Cosha*, or *Sanskrit Vocabulary of Amera Sinha*, and try whether the corresponding terms in the Celtic dialects have any resemblance to them^a. In general, I shall place the Sanskrit words first, and then the Celtic, subjoining any terms which appear to be of cognate origin in the other European languages.

^a I do not confine myself to the particular vocables given in the *Cosha*, when other genuine words can be found which are more to my purpose, nor do I think it necessary to follow the exact order of arrangement observed by the author of that vocabulary.

I. Words denoting persons and family or other relations ^b.

जनि— JANĪ, (a woman.)

Celtic, GEAN, Erse. (Lhuyd.)

Russian, Jena; Gr. Γύνη; Pers. Zen, Zenne.

वामा— Vama, (a woman.) (Am. Cosh.)

Celtic, FEM, Erse. (Lh.)

वामनी—vamani, (a woman.)

Celtic, femen, Erse. (Lh.)

Latin, fœmina.

वनिता—vanita, (a woman.)

Celtic, Bean and Bhean or vean, Erse; benw and benyw, Welsh. In regimen venw and venyw.

Greek, Βήνα et Βάνα, Bœotice vel Dorice, est mulier vel filia (Salmasius, p. 402. de Hellenistica) Βανήτες, (Bœot. pro γυναικες,) mulieres.

वीरः— virah, a hero, warrior; vir.

Celtic, FEAR, Erse ^c; man.

Gŵr and WR, Welsh, man; pl. GWYR and WYR; viri.

Hence, gwraig and wraig, a woman. Compare WR and WRAIG with VIR and VIRAGO or virgo.

N. B. Frag, Erse for gwraig; Germ. frau. Compare the Greek ἥρως, heros, with FEAR.

नरः— narah, man, also *Lord*, applied to the Deity.

Celtic, Nêr, lord.

Greek, ἀνὴρ.

3. There are three words in the Amera Cosha corresponding with the word *father*. These are

^b Amera Cosha, book ii. chap. vi. sect. 1.

तात, जनकः and पिता. One of these, janakah, is derived from a root allied to the etymon of genitor in Latin, which will be compared with its cognates hereafter. The other two may be traced as follows:

तातः— tātāh, plural tātāh.

Celtic, tād, plur. tādau, Welsh; tāt, Armoric; tāt, Corn.; taid, a grandfather, Welsh.

Cognates: ata, Mæso-Goth.; aita, Cantab.

पितृ— pitrē, nom. pitā, acc. pitārām.

Cognates: Persian, pader.

Gr. & Lat. πατήρ, πατέρα, pater, patrem.

Teut. dial. vater, fæder, father.

Celtic, athair^d, Erse.

मातृ— mātṛe, nom. mātā, acc. mātaram.

Persian, mader; Russian, mater.

Celtic, mathair, Erse.

Gr. & Lat. μητήρ, mater.

Teutonic, meder, mutter, mother, &c.

भ्रातृ— bhrātre, nom. भ्राता, bhrātā.

The nearest cognates are,

Russian, brāt'.

Celtic, brawd, (Welsh, in plur. brodyr; compare the Sanskrit plural bhratarah.)

Persian, braudur.

Teutonic, brothar, (Goth.) bruder, brother, &c.

Celtic, brathair, Erse.

Latin, frater. Compare φράτωρ.

^d That the word athair is really of cognate origin with pater, and other European words of the same stock, appears probable from a comparison of the following:

athair	pater	pitre. S.
mathair	mater	matre. S.
brathair	frater	bhratre. S.

स्वसृ— *swasrè*, a noun of the same form, making in the accusative *swasaram*, *sororem*.

This word has two sets of cognates; one, in which the sibilants are preserved as such; the other in which they are converted into gutturals, according to the mode of permutation illustrated in chap. ii. sect. 3.

Latin, *soror*, acc. *sororem*, probably *sosor*, *sosorem* in an older form^e, is nearly allied to *swasāram*.

Some languages alter the middle *s* by adding *t*; as, Russian, *sestra*; Teutonic dialects, *suistar* (Mæso-Gothic), *schwester*, sister.

Others change *s* for *h*, and finally omit it, as Celtic, *Siur*, *Erse*.

Secondly,

Persic, *Khauher*.

Celtic, *Chwaer*, (i. e. *khwaher*) Welsh; *chuâr*, Armor.; *hor*, *huyr*, Corn.

The Greek has no similar word.

दुहितृ— *duhitre*, nom. *duhita*, acc. *duhitārām*, (daughter.)

Greek, *θυγάτηρ*, *θυγάτερα*.

Pers. *dokhter*; Goth. *dauhtar*; Germ. *tochter*.

Celtic, *Dear*, (*dehar*?) *Erse*.

The Latin has no cognate word.

शशुरः— *swāsurah*, a father-in-law; accus. *swasurum*.

Latin, *socer*, *socerum*.

Russian, *svekor*; Goth. *svaihra*; Germ. *schwæher*.

Celtic, (converting sibilants as usual into gutturals,) *Chwegrwn*, Welsh; *Huigeren*, Corn.

^e Chap. ii. sect. 6.

श्वश्रुः—swasruh or shwashrus, a mother-in-law.

Latin, socrus.

Celtic, Chwegyr, pl. chwegrau, Welsh; hueger, Corn.

नप्तृ,—naptre, a grandson, and naptri, a granddaughter.

Latin, nepos and neptis, meaning also in a later sense, nephew and niece.

Celtic, Nai, Welsh; noi, Corn.; ni, Arm. for nephew; and Nith, Welsh; noith, Corn.; nises, Arm. for niece.

N. B. pt is mutable into th in Welsh, according to an observation in chap. i. sect. 2.

देवृ,—daivre, a brother-in-law, or husband's or wife's brother.

This word has no analogue, as far as I know, in any of the Celtic or Teutonic dialects.

Greek, *δαίρ*; Russian, *diever'*; Latin, *levir*.

वंशः—vangshah, offspring.

Persic, *pachah*, (a child,) pl. *pachegaun*.

Celtic, *bachgen*, Welsh.

The preceding words are the principal part of those by which family relations and the distinctions of persons are signified in the Indo-European languages. The greater part of them appear evidently to exist in the Celtic dialects under a peculiar form, which is the guarantee of their genuineness. That the Celtic words are really cognates of the Persian, Russian, Greek, Latin, German, and Sanskrit words no doubt can be entertained.

SECTION II.

Names of the principal elements of nature, and of the visible objects of the universe^a.

Light, Flame.

ज्वाला—Jwālā, also Jwalah.

Celtic, Gwawl, goleu, Welsh; golou, Arm.

The Sun.

हेलिः— hailih, or hailis.

Celtic, Haul, pronounced hail, Welsh; houl, heul, Corn.; heol, Arm.

Greek, 'Αέλιος, i. e. haëlios; ἥλιος, solar heat.

Note. The spiritus asper being changed for S in conformity with an observation in sect 4. of chap. 2. we have Saul for haul. Compare sol, Lat.; in Russ. solnstě.

Another Sanskrit word for sun is सन्तुः sunuh.

Comp. Sunno, M. Goth. and Germ. sonne, sun.

The Moon.

क्लैदा— klaidā; also klaidu.

Celtic, lheuad, or lhhyad, (pronounce nearly as chleuad,) Welsh. Also

ग्लौः— glauh, which by Sandhi becomes

ग्लौर— glaur.

Celtic, lhoer (chloer), Welsh; laor, Arm.; lâr, Corn. Compare luan, Erse, with luna, Russ. and luna, Latin.

Star.

तारा— tārā.

Greek, τεῖρεον; Welsh, seren; (pl. τεῖρεα, Welsh sêr and sŷr.) Armoric, steren.; Germ. stern. Goth. stairno; Pers. sitauren;

^a Amera Cosh. book i. sect. 1 and 2.

Latin, *stella* (perhaps a diminutive form of *stera*, as *tenella* from *tenera*). Compare also *ἄστερα*, and *astra*.

नभः—*nabhah*, sky, atmosphere, æther, heaven.

Celtic, Nêv. Welsh and Corn. ; *neav*, Erse.

Russ. *nebo*.

नभा—*nabhā*, a cloud, rain : *nabholaya*, smoke.

Celtic, Nivwl, (mist, cloud,) Welsh ; *Neal*, Erse.

Germ. *nebel* ; Gr. *νεφέλη*, *νέφας* ; Lat. *nebula*, *nubes*.

उदम्—*udum*, water ; whence **उन्द**—*unda*, to wet or moisten.

Russ. *voda*, water ; Pol. *woda*.

Latin, *udus*, *uda*, *udum*, and *unda*.

Goth. *wato* ; A. S. *wæter*, water. Compare *wet*, weather.

Greek, *ὕδωρ*, i. e. *ὑδωρ*, or *vudor*.

Celtic, *dwvyr*, pl. *duvrau*.

द्यु—*dÿu*. (a day.)

Celtic, *Di* and *dia*, Erse ; *dydh*, Welsh.

Latin, *dies*.

Goth. *dags* ; A. S. *dæg*, day.

निशा—*nīsā*. night.

Celtic, *Nôs*, Welsh. *Notch'*, Russian.

More remote are the following :

Nochd, Erse ; *nahts*, Goth. ; *nacht*, *night*, Germ. ;
νύξ, *nox*.

मीरः—*mirah*, ocean, sea.

Celtic, *Môr*, Welsh ; *muir*, Erse. More, Russian ;
meer, *mere*, Germ. D. ; *mare*, Lat.

धरा—*dhara*, earth.

Celtic, *Daiar*, Welsh. (in regim. *dhaiar*.)

there is another Welsh word, *TIR*. Compare *terra*, Lat. ; *airtha*, Goth. ; *talamh* and *tellur*, Erse, with *tellurem*, Lat.

आष्ट—	aashtra, ether, air.
Celtic,	athair, Erse.
Greek,	αἴθρ—αἴθρεια, ἀήρ.
Celtic,	awyr, Welsh; aer, Lat.
अग्निः—	agnis, or agnih, (fire.)
Latin,	Ignis; Welsh, tân, i. e. taan.
Mæso-Goth. fon.	
द्रुः—	druh and drus, (a tree;) derucht, Pers.;
	Δρῦς, Gr.; Derw, Welsh; dair, Erse (an oak tree.)

SECTION III.

Names of animals.

Of the terms for different species of animals, it appears that few, comparatively, are common to the Sanskrit and the European languages. Nor is this circumstance difficult of explanation: emigrating tribes in seeking a new climate, and leaving behind them a great part of the stock of animals for which they had previously names, are obviously under the necessity of inventing other significant appellations for those peculiar to their new country. In this respect the Celtic dialects are under the same circumstances as the other European languages; and it may be clearly shewn that they partake of a common stock of terms with these languages; for though the European idioms differ from the Sanskrit, they have a common stock of such terms among themselves. There are, however, some instances of agreement with the Sanskrit, and this remark includes nearly all the domestic animals. In all the following instances the Celtic terms are cognate with those belonging to the other European languages, and in some they bear a remarkable resemblance to the Sanskrit.

The interchange of sibilant with guttural consonants is here to be observed, as in the instances before cited. Refer to numbers 1, 2, and 3.

Dog.

Sanskrit, Shunah and shunī; shūnī, bitch.

Celtic, Ki, pl. cwn, Welsh; chana, Erse,

Greek, κύων, pl. κύνες; Lat. canis; Goth. hunths, hound.

Hog and Sow.

Sanskrit, Shūkarah, (hog;) Pers. khūk, (hog or sow.)

Celtic, Hwch, Welsh, (sow.)

Greek, ὕς; Lat. sus.

Horse.

Sanskrit, ashwah or ěshuus.

Latin, (changing sibilants intogutturals,) equus.

Greek, ἵππος, Æol. ἵκκος.(?)

Celtic, Each, Erse; asb, Pers. Also,

Greek, Καβάλλης; Lat. caballus.

Celtic, keffyl, Welsh; caual, Arm.; capul, Erse. Also, Pers. fars; Germ. ross; Eng. horse.

Ass.

Greek, ὄνος; Lat. asinus.

Celtic, Asyn, Welsh; asal, Erse.

Goat.

Sanskrit, ajah and ch'haga; Gr. αἶγα.

Latin, caper.

Celtic, gavar, Welsh; gobhar, Erse.

Ram.

Sanskrit, Uranah.

Celtic, Hwrdh, Welsh; urdh, Arm.; hor and hordh, Corn.

Latin, aries.

Oxen.

Sansk. Ukshan or ušan, ox or bull.

Celtic, Ych, Welsh ; agh, Erse ; ochs, Germ. Also,
Greek, βόϋς ; Lat. bos, boves.

Celtic, Buw, Welsh ; bo, Erse. Also,
Latin, bucula ; Welsh, buwch.

Bull.

Greek, ταῦρος ; Lat. taurus.

Celtic, tarw, Welsh ; tarbh, Erse. (Compare Tōr,
Chaldee.)

Cow.

Sansk. Go ; Germ. kuh, cow.

Fish.

Greek, ἰχθὺς (olim *ἱχθὺς* ?)

Latin, piscis.

Celtic, Pŷsg, Welsh ; jasn, Erse.

Germ. fisch, fish.

Swan.

Latin, olor.

Celtic, alarch, Welsh ; eala, Erse.

Pigeon.

Latin, columba ; golub', Russian.

Celtic, colommen, Welsh ; cwlm, Arm. ; colm,
columan, Erse.

Frog.

Latin, rana.

Celtic, kranag, Corn. ; ran, Arm.

Fawn.

Greek, ἔλαφος.

Latin, hinnulus.

Celtic, elain, Welsh.

Lamb.Greek, *ἀγνός*; Latin, *agnus*.Celtic, *oen*, W.; *ôan*, Corn. and Arm.; *an*, Erse.**Crane.**Greek, *γέρανος*; Germ. *krannich*; Eng. *heron*.Celtic, *Garan*, W.; and *krÿr*, Erse, *korr*.**Cuckow.**Greek, *κόκκυξ*, Lat. *cuculus*.Celtic, *Côg*, W.; *chuach*, Erse.**PARAG. 2.**

The following list of terms, chiefly for inanimate objects, display nearly the same degree of affinity as the preceding.

Welsh.	Erse.	Greek.	Other languages.
derw	dair	δρῦς	{ druh, Sansk. (a tree)
faw, fawydh	faidhbhile	φηγός	fagus, beech
colhen, côlh		κόρυλος	cornel tree
lhyren and } lhyriaid }		λείριον	lilium, lily
lhêch	leac, liag	λίθος	
lhaeth	laith	γάλακτα	lac, lactis
aradyr		ἄροτρον	aratrum
cwÿr	ceir or keir		cera
braich		βραχίον	brachium
lhwch	loch		lacus
lhu and } lhuaws }		λαός	lludi, Russ.
kentar (a } nail) (Lh.) }		κέντρον	
enw	ainm	ὄνομα	{ nomen nāman S.
lhùg		alōka, Sansk.	lux
mêdh (mead)		μέθυ (wine)	
mel	mil	μέλι	mel

Welsh.	Erse.	Greek.	Other languages.
melin	meile	μύλος	mola
dant		δόντα	{ dent-em dantah, Sans.
awr	uair	ώρα	hora
aur	or		aurum
corn		κέρας	cornu
coron	choroin		corona
cybhigl	chuvachail		cubiculum
rhyn (point)	sron	ρῖν	
ysgraff	sgaffa	σκάφη	scapha
scâff Arm.			
wr, wŷr	fear		vir, viri
wraig	frag		virago
gwrach		γραῦς	
gwîn, wîn	fin	Foῖνος	vinum
arriant	airgidh	ἀργύριον	argentum
tervyn	teor	τέρμα	terminus
einion	ineoin	ἄκμων	incus
pen	cean	κεφαλῇ	caput
colovn	colbh		columnus
swn	soin	τόνος	sonus
byw	bio	βίος	vita
halen	salen	ἅλς	sal
cader	chathair	καθέδρα	chair (Eng.)
sowdwl	sael	κέλη	{ calcaneus heel. Eng.
croen	croiccionn	χρῶς	
erw		ἄρουρα	arvum
dôr (W. and Armor.)	dorus	θύρα	{ thur (Germ.) dwar (Sansk.)
parth			parte
creuan	pairt	κάρηνον	
mynydh			{ monte mountain
fynnon			fonte
avon	amhain		amne
tir	tir		terra

Welsh.	Erse.	Greek.	Other languages.
	talamh		tellus
môr	muir		{ mare, meer, Gerin.
cylha		κοιλία	
cylch		κίρκος	{ circulus, circus
deigryn		δάκρνον	lachryma
eigion		ὠκεανόν	oceanum
hedhwch, pl.	}	ἡσυχία	
hedhychau			
peace, quiet			
hwyliau			velæ
meidr		μέτρον	
gwŷr and	}		{ verum and veritas
wŷr			
cariad		χάρις	caritas
cawr, a giant		γαῦρος	{ ghōrah S. horrible
	righ, a king		{ raja Sansk. regem Lat.

SECTION IV.

Verbal roots traced in the Celtic and other Indo-European languages.

जन, Jān, a verbal root, whence the verbs जजन्ति, JAJANTI, gignit, and जायताi meaning γίγνεται, gignitur, he is born; middle voice, jajana, γέγονα. Hence the following nouns in Sanskrit.

Janah, a man.

Jani, a mother.

Janus, birth.

Janitre, a father.

Janima, birth, procreation.

In Greek, *γεννάω, γίνομαι, γέννημα, γένος, κ. τ. λ.*

Latin, *gigno, genus, genero, genitor, &c.*

Celtic,

1. Welsh, *GENI*, to be born.

genedig, brought forth, or born.

genedigaeth, birth, nativity.

geneth, a girl.

genid, birth.

genilh, progeny.

2. Erse, *GEIN*, offspring.

geinim, to beget.

geinéighim, to bring forth, and

geintear, *gignitur*.

𑂔—*MRE*, a verbal root, whence the verb *MRIYATAI*, *moritur*, and the causal verb *mārayāmi*; *MRE-TUS*, *mortuus*; *MARAH*, *mors*.

The Greek language wants this word, unless the termination *μόςρος* be derivable from it, though attributed to another verb.

Latin, *mori, mortuus, &c.*

Celtic,

1. Welsh, *MARW*, to die.

marw, and *marwawl*, adj. *dead*,
and *deadly*.

2. Erse, *marbh*, i. e. *marv*, *dead*.

meath, *death*; and *meatham*, to die.

Compare Heb. מֵת, *mēth*, *dead*.

Slavonic, Russian.

umirat', to die; *umertii*, *dead*.

mor', *mortality*.

जाव्—*Jiv*, a root whence the verb

JIVAMI, I live, or *JIVATI*, *vivit*.

jiva, *life*, (Am. Cosh.)

In Latin, vivo, vita.

Greek, βίος, βίω.

Celtic,

1. Welsh, BYW, or VYW, verb, to live.

byw, adj. vivus

bywyd, vita.

bywâu, to vivify.

BEUA, (in Cornish,) to live. Lhuyd.

2. Erse, BEO, to live.

BEATHA, life, vita.

ज्ञा—Jnā, a verbal root, whence the verb jñāmi, I know; jñāti, he knoweth; jñātus, jñāta, jñātum, adj. notus, nota, notum.

Greek, γινώσκω, and γινώμι, γινώσκω, γινώμη, κ. τ. λ.

Latin, nosco, i. e. gnōo, gnotus, &c.

German, &c. kennen, know, &c.

Welsh, Gŵn, I know.

विद्—Vid, a verbal root, whence the verb VAIDA, (विद्वा, in a preterite form, with a present signification, I know, he knows; vaiditum, to know; also

vidan, wise.

vidanti, vaida, wisdom.

Greek, εἰδέω, ἴδω, οἶδα. ol. Φειδέω, or Φειδέω.

Latin, video.

Teutonic, { vide, to know; vidende, knowledge,
Danish.
 { weise, wissen, *German.*
 { wit, wot, wise, *English.*

Celtic,

1 Welsh, gwŷdh and wŷdh, knowledge.

gwydhad and wydhad, to learn.

gwydhai, gwydhawl, wise.
 gwybod, (irreg. verb,) whence.
 gwydhost and wydhost, knowest.

2. Erse, fis, or fios, knowledge. (Lh.)
 fisc, a seer ; fiosaighim, to know.

Here the roots are vid, S; ð or ɛð; vid. Lat.; vid, wit, Teutonic ; wydh, or gwydh, Welsh.

बुध्, Budh, a root, whence the verb BODHATI, he knows or understands.

budhah, a sage.

Celtic,

Erse, FODH, knowledge.
 fodhach, wise.

N. B. The Sanskrit root, buda, to know, or discern, has an equally striking affinity with the Erse, fod, art or skill.

श्रु, Shru, a verbal root signifying to hear.

Infinitive mood, SHROTUM.

SHRUTAH, heard, adj. and part.

In Slavonic, changing *l* for *r*.

Russian, SLUCH, hearing.

SLUTAT', to hear.

In Greek, sibilants changed to gutturals, (ch. 2. sect. 3.)

κλύω, to hear.

κλύτος, adj.

In Celtic,

Welsh, CLYW, hearing.

clust, an ear.

Erse, cluinam, I hear.

CLU, hearing, fame.

cluas, an ear.

CLOTHA, he heard.—Lh.

Here the roots in all the above languages are shru, slu, κλυ, clu.

लोच्—lōch, a verbal root, to which are referred the two following verbs :

1. LOCHATAI, he sees ; whence
lochan, an eye.

Greek, λείσσει, he looketh.

English, looketh.

Celtic, lhygad, W. an eye.

2. Locháyāti, lucet.

Latin, lux, luceo.

Teutonic, licht, light, &c.

Celtic, Welsh,

lhwg, light ; lhuched, lightning.

lhewychu, to light.

lhygu, to brighten, &c.

दृश्—Dresh, a verbal root, signifying
to see.

Pret. dāďārshā, I saw.

Greek, δέρω.

δέδορκα.

Celtic, Erse,

DEARC, a verbal root, signifying sight,
seeing, also an eye.

dearcam, to see.

dearcadh, seeing, sight.

Welsh,

drem, sight, &c.

Here the roots are dresh, or rather dŕrsh, δερκ,
and Celtic, dearc.

लिह्—lih, a verbal root, signifying to lick,

1. person, proper form LIHAI, lingor.

Greek, *λείγω*.

Latin, *lingo*.

Goth. *laigwan* ; A. S. *liccan*.

Eng. *lick*.

Celtic, Welsh,

lhyaw, lhyvu, to lick.

llyviàd, licking.

Erse, *lighim*.

do leigh se, he licked.

𑖦𑖯—*sht'hā*, in inflection 𑖦𑖯𑖪, *sth'ā*, a verbal root, whence the verb **TISHTATI**, he stands.

tishtami, I stand.

Greek, *ἵσταμι* or *ἵστημι*, i. e. *σίσταμι*, and the obsolete *στάω*.

Latin, *sto, stare, status, sisto, &c.*

Teut. *standan*, (Goth.) *stehen*, stay, stand.

Celtic, Erse,

STA, stand.

stadam, to stand.

do stad se, he stood.

Welsh, *eistedh*, to sit.

eistydh, sitting.

𑖦𑖯𑖪𑖯—*rich'h*, a verbal root, whence the verb **RICH-CH'HATI**, he moves towards, *reacheth*, *Richch'hami*.

Greek, *ῥέγεται, ῥεξις*.

Latin, *porrigit*.

Teut. *rakyan*, (Goth.) *reichen, erreicht*, (Germ.) *reacheth*, (Eng.)

Celtic, **RIGH**, a root in Erse ; whence *righim*, I reach ; *richeadh*, to stretch, reach, &c.

अस्—*as*, a verbal root, whence the verb substantive,

ASMI, ASI, ASTI, sum, es, est; SYAM, sim, or siem.

Pers. EST, he is; hesten, to be.

Greek, εἰμι, (ol. ἐσμι,) ἐσσι, ἐστί.

Latin, esum, es, est.

Teut. ist, is, &c.

Celtic, YS (passive form) and ydis.

OES, he is, Welsh.

Erse, IS, as is me, is tu, i se, I am, thou art, he is.

N.B. This root is defective in all the above languages, and a great part of the forms of the verb substantive are supplied from the following.

भू—bhū, a verbal root, whence the verb BHAVAMI, I am; pret. bābhūva, fui; babhuvima, fuimus.

Pers. BUDEN, to be; BUD, he was; existence, being.

BU, be thou.

Latin, fuo, fui, fuvimus.

Teut. beon, to be, A. Sax. bin, bist, be, &c.

Sclav. buit', to be, Russ.

Greek, φῑω, φῑμι, φῑναι.

Celtic, BŪM, BUOST, BU, Welsh; fui, fuisti, fuit.

bŷdh, erit; bôd, esse.

Erse, BU mi, I was; BHITH, to be.

N.B. Compare Byd, the world, from the same root, with Bud in Persian, and Bhuh, the world, in Sanskrit.

अन—an, a verbal root, whence the verb *anyatai*, respirat, vivit, and *animi*, respiro. The first person of anyatai was perhaps, as the analogy of the other persons and of the active voice

would suggest, originally *anyamai*, instead of *anyai*: whence

Latin, animus, anima, animatus.

Greek, *ἄνεμος*.

Celtic, anaim, (Erse,) soul, spirit.

तन्—tan, a verbal root, whence the verb *tanoti*, he extends, stretches.

Greek, *τείνω, τανύω, τάνυμαι*.

Latin, tendo.

Celtic, TAEN, spreading, extension.

taenu, to spread, extend.

दा—da, a verbal root; whence the verb *dadami*, I give.

Pers. daden, to give.

Greek, *δίδωμι, δόω*.

Latin, do.

Celtic, DAIGH, a root in Erse; whence daighim, I give.

अद्—ad, a verbal root; whence the verb ADMI, *atsi*, ATTI, edo, edis, edit.

Greek, *ἔδω*.

Latin, edo, esu, &c.

Celtic, YSU, or ESU, edere; ysawl, edax, Welsh.

ITH, a root in Erse; whence ithim, I eat; itheadh, eating.

युज्—yuj, a verbal root; whence are derived several verbs meaning to join, and other words, as follows:

YUGUM, a couple; YUGAH, a yoke.

YŌJAMI, præt. YUYOJA, (conjungere, conjugare).

yunajmi, (yunŭjmi) præt. yuyoja (jungere) and yoksyami.

Pers. yoo, a yoke, also yŭgh.
yŭghiden, to yoke.

Greek, ζεύγνυμι, ζύγος, κ. τ. λ.

Latin, jungo, jugum.

Russ. jgo, a yoke.

Teut. joch, Germ. yoke, Eng.

Celtic,

1. Welsh, JAU, a yoke ; JEUAW, to yoke.

JEUAD, a yoking : JEUAETH, a yoked state.

N. B. The Welsh words are nearer to the Sanskrit and Persian than to the European languages.

2. Erse, cuing, or kuing, a yoke.

jeugaff, to yoke or couple. (Armoric.
Lhuyd, p. 245.)

देश—dansh, a verbal root ; whence the verbs DASHAMI and DAKSHYAMI, (mordeo,) to bite.

Noun, DANTA, a tooth.

Greek, δάκνω, n. ὀδόντα.

Latin, dens, dentes.

Celtic,

Welsh, daint, n. aggr. the teeth.

dant, pl. dannedh.

deintiaw, verb, to bite.

Corn. danta, to bite.

The following verbs, or etymons of verbs, are common to the Celtic and some of the other European languages. Where the resemblance is only with the Latin, it may be thought probable that the Britons derived them from the Romans ; but when

the coincidence is between the Celtic and Greek, or Sanskrit, or other remote branches, the fact will admit of no similar explanation.

dagru and deigraw W.	δακρύω	
and	and	
deigryn, W.	δάκρνον	lachryma.
darhunaw	δαρθάνω	
dēu and		
dyvod, W. to come } donet, Armor.	δύω and δύνω	
dysgu, W.	διδάσκω	disco et docen
dylu and	δεῖ and δοῦλος	
dylŷaw, to be obliged, W. }	δουλεύω	
dyroï, W.	δωρέω	
canu, W. sing }	cano	{ gānum, Sansk
canam, Erse }		{ singing, song.
iachâu, to heal, from }		
iâch, sane, whole }	λάομαι	
cusau, }	κύσω, Gr.	{ kús and kusya-
cusanu, W. to kiss }	küssen, Germ.	mi, Sansk. am- plector
elu, W. to go	ἐλεύθω	
elsynt, they came	ἤλυσαν	
galw, W. to call	καλέω	call
cleiniaw, W. to lie	κλίνειν	
cleisiaw, W. to bruise	{ κλάω, κλάσω et κλάσις	
cudhiaw, W. to hide, }	κεύθω	
kîth and kitha, Cornish }		
curaw, to beat, knock	κρούω	
cyriaw, to limit, border	κείρω	
chwareü, to gambol, sport	χαίρέω	
balâü, to spring out, and	βαλλέσθαι	
balaw, noun	βολή, ἐκβολή	
dalw, to catch	δέλω, inesco	
eb, to say, as }	ἔπω, dico	
eb eve said he }	ἔφη, said he	
elwi, to gain	ἐλεῖν	

ambylu to blunt	}	ἀμβλύνω	{	mlani and mla-
ambylus, blunt, adj.		ἀμβλὺς		nus, S. languid
degadu		δεκατόω		
eichiaw, to sound, from	}	ἤχέω, n. ἤχος,		
aich, pl. eichiau		pl. ἤέα		
gwthiaw and wthiaw,				
to thrust	}	ώθέω		
lholiaw, to babble		λαλέω		
lhipâu, to droop		ἐλλείπειν		
maelu, to earn wages		μελετάω		
men, a place		μενέω		
medw, the mind		μηδέω		medito
meru, to droop	}	μαραίνω		
merwinaw, to benumb,				
or deaden	}			
tormu, to assemble round		turma		
ystyr and ystyriaw, to	}	ιστορέω		
consider, note, reflect				
caru, to love		carus		
cob, cobio, to strike		κόπτω		
		man and manu-	}	mens, Lat.
		tai, S. to know,		
		understand		
menw, mind				
novio, W. }	}	νέω, no, Lat.		
snav, E.				
credu, W. }	}	credo		
credeim, E.				
eliaw, W.		ἀλείφω		
dosparthu		dispertior.		

SECTION V.

Adjectives, Pronouns, and Particles.

Parag. 1. ADJECTIVES.

अल —aalah, ā, m. (ample, vast,)

all, alle, whole, Germ.

ἅλος, Gr. hôll, oll, Welsh; uile, Erset

उच्चः—uchchah, ā. m. (high.)

uch, higher, upper ; uchel, uchach. (W.)

uchchata, pride. (Sanskrit.) uchediad,
soaring. (Welsh.)

ἰψοῦ, Greek. Compare ἰψηλος and uchel
in Welsh.

hoch, high. Germ.

महा—and **महत्**, mahā and mahat, great.

Greek, μέγα. Latin, magnus, major.

Welsh, mawr. Erse, môr.

Germ. mehr, more, &c.

युवन्—yuvan.

yuvan, Pers.

jau, jeuant, jeuanc, Welsh.

juvenes, juvenus, Latin.

jung, young, Germ. yanuii, Russian.

जीनः—jinah, an old man.

sean, Erse ; hên, Welsh ; senex, Lat.

नव—nava, (Am. Cosh.) or **नवः** navah.

Greek, νέος ; Latin, novus,

Germ. neu, new ; Russian, novaii.

Celtic, newydh, Welsh ; nuadh, Erse.

The following are chiefly adjectives common to the
Celtic and the Greek languages.

alh, (W.)	eile, (E.)	ἄλλος	alius
côch		κόκκινος	
cloff		χλωδός	claudus
medhws	misgeach	μέθυστος	
melus, sweet	milis	μειλίσσω	
melyn, yellow		μήλιος	
tlawd		τάλας	
caled		χάλεπος	
* câr	chara	χαρίεις	carus

trist	tuirseach	τρυσσός	tristis
byr	gear	κυρτός	brevis
either		ἑτέροι	cæteri
ambylus		ἄμβλυς	
dilys		δῆλος	
twym		{ θερμός	
		{ θέμερος	
iachâus		ἰήϊος	

Parag. 2. PRONOUNS.

The personal pronouns must be given in full when we proceed to the inflections of verbs, which are conjugated by means of them. It is only requisite at present to anticipate the remark, of the truth of which the reader will be afterwards convinced, that the personal pronouns in the Celtic dialects consist of the very same elements, and these but slightly modified, which pervade all, or nearly all, the other languages referred to the Indo-European class.

The possessive pronouns are in the Celtic formed, as in other languages, by a modification in the ending of the corresponding personal pronouns.

Thus in Welsh.

	Personal pronouns.	Possessives.
1 Sing.	mi, I,	becomes mau
2 —	ti, thou,	—— tau
3 — masc.	ev, in Erse se	—— ei
	fem. hi, in Erse si	—— ei
1 Plur.	ni, we	—— ein
2 —	chwi,	—— eich
3 —	hwy or } hwynt }	—— eu

The interrogative pronouns serve to exemplify

the remarks made on the interchange of consonants in chapter 1. section 2.

Interrogative Pronoun.

In Greek, *τίς* *τί*.

N. B. The existence of the interrogative particles *πῶς*, *ποῖ*, &c. renders it probable that there was an older Greek interrogative pronoun corresponding, as *πῖς*, *πῖ*.

In Latin, *quis* *quæ* *quid*
 qui

In Erse, *kia* *kidh*
 kad

In Sanskrit, *kah* *ka* *kim*

In Welsh, *pwyl* *pa*.

Parag. 3. PARTICLES.

ni—na (Welsh)	<i>νή</i>	na Sansk.
yna	<i>ἴνα</i>	
wng, yng, near	<i>ἐγγύς</i>	
agaws, or agos, prep.	<i>ἐγγύς</i>	
cyd, cyda, pron. cūda	<i>κατά</i>	
am, round	<i>ἀμφὶ</i>	um in German.
heb, without	<i>ἀπὸ</i>	ab, abs
oc, out of	<i>ἐκ</i>	ex
trwy		through, durch
yn	<i>ἐν</i>	
neu, particle of affirmation	<i>ναὶ</i>	
cyn, with. cum, con, Lat.	<i>σὺν</i> , Gr.	सम, sum, Sansk.
either	<i>ἄτερ</i>	
di (insep. part.) di, dis, Lat.	<i>δι</i>	
dyre, veni	<i>δεῦρο</i>	
evo	<i>ἔμα</i>	
etto	<i>ἔτι</i>	yet
mo, negative }	<i>{ μὰ</i>	
after ni }	<i>{ οὐ μὰ</i>	
blaen	<i>πλήν</i>	

CHAPTER IV.

Proofs of a common origin derived from the grammatical structure of the Celtic and other Indo-European languages.

SECTION I. Review of the preceding facts and inferences.
Introductory remarks on the personal inflections of verbs.

THE instances which have been pointed out in the last chapter, to which I believe that it would be easy to make great additions, are sufficient to prove that there is an extensive affinity in the component vocabularies of the Celtic dialects and those of the other languages with which they have been compared. The examples of analogy already adduced are by far too numerous and too regular, or in accordance with certain general observations, to be the result of mere chance or accidental coincidence. It must likewise be remarked that they are found in that class of words which are not commonly derived from one language into another. I allude particularly to such terms as denote the most familiar objects and relations, for which no tribe of people is without expressive terms. When such relations as those of father, mother, brother, and sister are expressed by really cognate words, an affinity between the several languages in which these analogies are found is strongly indicated. The same remark may be made in respect to the names of visible bodies and the elements of nature, such as sun, moon, air, sky, water, earth. Lastly, the inference is confirmed by finding many of the verbal roots of most frequent occurrence, as the verb substantive, and those which express generation, birth, living, dying, knowing,

seeing, hearing, and the like, to be common to all these languages.

It may be remarked, that in the Celtic language, as well as in the Persian, and in some German dialects, the Sanskrit and Greek words are represented by terms in a shortened and broken form, which have lost the regularity and beauty of their terminations. Yet there are several instances in which the Celtic words resemble more nearly their Sanskrit analogues than those belonging to other European languages, as the terms *tâd* and *brawd* for *tatah* and *bhrata*, meaning father and brother. In many examples the Slavonic dialects and the Persian language display the transition from the form of words peculiar to the Sanskrit to that of the northern European idioms. The root *SHRU* or *SRU*, meaning to hear, becomes in Russian *SLU*; but in Greek and in Celtic *κλυ* and *CLYW*, or *CLU*. *Ashwah*, a horse, becomes *asb* in Persian, and in Erse *each*. *Shukarah*, a hog, is in Persian *khuk*, and in Welsh *hwch*. In most cases we discover something to confirm the laws of deviation laid down in the preceding chapters, according to which it appears that words derived by the western from the eastern languages are changed in a peculiar way. The most general of these alterations is the substituting of guttural for sibilant letters, which by the Celtic dialects is made almost uniformly, and very frequently by the Greek and the Teutonic.

There is a still more striking resemblance in the grammatical forms of these languages, which I shall now endeavour to point out.

Professor Murray has attempted to illustrate the grammatical structure of the European languages

from a quarter to which few persons would have been inclined to look with any hope of success for the means of its elucidation, I mean the Teutonic idioms, and even some of the modern dialects of the German language. It would really appear that in these idioms some words, affording traces of ancient forms and derivations, have still survived, which can no longer be recognised in the classical languages of India, of Greece, and of Italy. In the following pages it will more evidently appear, if I am not mistaken, that from the Celtic dialects a part of the grammatical inflections, and that a very important part, common to the Sanskrit, the Æolic Greek, the Latin, and the Teutonic languages, are capable of an elucidation which they have never yet received. This can only be accounted for by the remark that the Celtic people have been more tenacious of the peculiarities of their language, as they have been in many respects of their customs and manners, than the other nations of Europe.

The mode of conjugating verbs appears to be essentially the same in all these languages. It consists partly in certain variations indicating time and mood, and partly in the addition of particular endings, by which the differences of number and person are denoted. The former class of variations will be considered in the sequel. At present I shall investigate the nature and origin of the personal terminations, or of those increments or suffixes which the verbal roots receive for the purpose of distinguishing the person and number. It will appear that these are all pronominal suffixes, or abbreviated or otherwise modified pronouns. This has been conjectured and shewn to be probable by many phi-

lological writers, but the proof has always been defective in several particulars, because this subject has not been surveyed in a sufficiently comprehensive manner, and with attention to all the evidence which can be brought to bear upon it, and especially to that portion which is derivable from a comparison of the Celtic dialects.

In proceeding to this investigation, I shall in the first place shew by examples what are the characteristic endings of the different persons of the verb in several languages.

SECTION II.

Personal endings of the Sanskrit verbs.

One system of personal terminations belongs to all Sanskrit verbs, and the differences of conjugation which are distinguished by grammarians consist in the changes which the verbal roots undergo. The following is an example displaying the terminations of the present tense as they are subjoined to the verbal root *tud*, to strike, in Latin *tundo*.

	1. Person.	2. Person.	3. Person.
Singular,	Tudāmi	Tudasi	Tudati
Dual,	Tudāvas	Tudat'has	Tudatas
Plural,	Tudāmas	Tudat'ha	Tudanti.

This verb belongs to those classes of roots which insert a vowel *a* between the theme and the personal endings. Others subjoin these endings immediately. The personal endings alone are as follows:

	1. Person.	2. Person.	3. Person.
Sing.	-mi	-si	-ti
Dual,	-vas	-t'has	-tas
Plur.	-mas	-t'ha	-anti.

The same terminations belong to the future tenses as to the present ; but those tenses which have the augment prefixed to the verb have the personal endings, as in Greek, in a more contracted form. The following is the first preterite of the verb tudami, corresponding closely to the Greek imperfect ^a.

Præteritum augmentatum 1.

	1. Person.	2. Person.	3. Person.
Sing.	Atudam	Atudas	Atudat
Dual,	Atudāva	Atudatam	Atudatām
Plur.	Atudāma	Atudata	Atudan.

The abbreviated personal endings in Sanskrit verbs are as follows :

Sing.	-am	-s	-t
Dual,	-va	-tām	-tām
Plur.	-ma	-ta	-an ^b .

There is another form of the indicative tenses in the parasmaipadum, or active voice, which it may be right here to exhibit. It is that of the reduplicated preterite, formed by rules nearly the same as those of the preterperfect in Greek verbs. The præteritum reduplicatum of the verb tud or tudami is as follows :

	1. Person.	2. Person.	3. Person.
Sing.	Tutōda ^c	Tutōdit'ha	Tutōda
Dual,	Tutudiva	Tutudat'hus	Tutudatus
Plur.	Tutudima	Tutuda	Tutudus.

N. B. It may be observed that the vowel of the root *u* is changed into *o* in this instance by the form termed *guna*, of the

^a I represent the augment अ by an *a* in following sir W. Jones's orthography ; but it might perhaps as correctly be represented by the Greek *ε*.

^b Bopp, Gram. Crit. Sansk. p. 144.

^c In Latin tutudi.

influence of which we trace the result in the Greek reduplicate preterite of the old form, commonly termed the preterperfect of the middle voice. We shall observe likewise the influence of guna to be very extensive in the inflections of verbs in the different European languages.

SECTION III.

Terminations characteristic of the persons of the Greek verb.

Of the two principal forms of inflection by which Greek verbs are conjugated, one, viz. that of verbs in μ , corresponds nearly with the Sanskrit. There are strong reasons for believing this to be an ancient and perhaps the original method of conjugating verbs used in the Greek language^a, independently of the circumstance that it so nearly resembles the forms of the Sanskrit. This conjugation comprises the verb substantive and a great many old and very anomalous and defective verbs, and those of very common and familiar occurrence^b. The conjugations of verbs in ω are so much more regular, that they bear the appearance of a designed and systematic scheme introduced for the sake of simplifying the inflections of the language. The Doric form of the verbs in μ will probably serve to exemplify the personal endings as they existed in the earliest state of the Greek language of which we can obtain any knowledge. The following is the Doric form of the verb ἴστυμι in the present tense :

^a Matthiæ indeed seems inclined to believe that there was a still older form of Greek verbs than those now extant, and that the termination was in ω .

^b As $\phi\eta\mu\iota$, $\epsilon\acute{\iota}\mu\iota$, ἴημι , ῆμαι , &c.

	1. Person.	2. Person.	3. Person.
Sing.	ἴσταμι	ἴστας	ἴστατι
Dual,	—	ἴστατον	ἴστατον
Plur.	ἴσταμεν	ἴστατε	ἴσταντι.

The irregular and defective verbs often display the primitive verbal forms of a language better than those which are regular, and of the former the verb substantive, which is anomalous in many languages, may be considered as the most ancient. The following is the present tense of the verb substantive in its oldest forms.

	Singular.	Old form.
1. εἰμι,	Doric form εἰμι, originally (?)	ἐσμι
2. εἶς;	in Homer, Pindar, Theocritus,	ἐσσι
3. ἐστί		ἐστί
	Dual.	
1. —		
2. ἐστὸν		ἐστὸν
3. ἐστὸν		ἐστὸν
	Plural.	
1. ἐσμέν,	Doric εἰμές, originally (?)	ἐσμές
2. ἐστὲ		ἐστὲ
3. εἰσὶ	Doric	ἐντι

It seems from this statement, that the following are the personal endings of the verb substantive in the present tense, subjoined immediately to the verbal root.

	Singular.	Dual.	Plural.
1.	-μι	—	-μες
2.	-σι	-τον	-τε
3.	-τι	-τον	-ντι

These will be seen on comparison to be nearly identical with the endings of Sanskrit verbs. A like analogy may be traced by comparing the abbreviated

form of the augmented preterite with the Greek preterimperfect and the preter reduplicate with the Greek preterperfect; but as it is not my principal aim to trace the analogies of the Sanskrit and Greek languages, I shall say nothing further on this subject.

SECTION IV.

Personal endings in Latin verbs.

It is probable that the first person of the present tense in the indicative mood of Latin verbs terminated originally in *m* instead of *o*. This results from a comparison of the endings of the other persons in the various tenses of the indicative mood, and from the analogy afforded by the first person in the subjunctive mood. The supposition is confirmed by the actual existence of old and anomalous forms, *sum* or *esum*, and *inquam*, where the termination in *m* is still extant.

The personal endings in Latin verbs, exclusive of the imperative mood, may be comprised in the following forms.

Singular.

1.	-am	-em	-im
2.	-as	-es	-is
3.	-at	-et	-it.

Plural.

1.	-amus	-emus	-imus
2.	-atis	-etis	-itis
3.	-ant	-ent	-unt, int.

SECTION V.

Terminations which distinguish the persons of verbs in the Teutonic dialects.

A new and very important light has been thrown on the structure and history of the Teutonic languages by the researches of Professor Jacob Grimm. I shall endeavour to abstract in a short compass some of the results of his inquiries which relate to the inflections of verbs in the oldest of these languages, as being closely connected with the subject now under consideration.

The verbs are divided in all the Teutonic dialects into two classes, chiefly distinguished from each other by the manner in which they form the past tense and participle. These different modes of inflection are termed by Dr. Grimm respectively the strong and weak conjugations. The former is supposed by that writer to be more ancient than the other, and to be in fact the genuine and primitive method by which the German nations distinguished the times and modes of action and of passion in the use of verbs. In this first method a great proportion of the original and peculiar roots of the Teutonic dialects were conjugated; but its use has given way in a great degree to a different scheme of inflection, which of late has become prevalent, as being more in harmony with the genius of modern language. The latter is supposed to be more recent in its origin, and it comprises, besides many primitive German roots, all foreign words which have been adopted into the vocabulary of the Teutonic nations. The English reader will have an idea of the strongly and weakly inflected conjugations by observing that all those verbs belong to the former which make

the past tense and participle by changing the vowel of the monosyllabic root, as *speak, spake, spoken*; while the inflection of *praise, praised, praising*, exemplifies the weak conjugation. In the Mæso-Gothic, which preserves the oldest forms of the Teutonic languages, there is, in addition to the change of vowel which characterises the past tense, a reduplication of a part of the root^a. There are twelve forms belonging to the strongly inflected verbs, and three or four of the other class. As the characteristic parts of the verbs of each conjugation Dr. Grimm has given the indicative mood, present tense, first person singular, the first person singular and plural of the past tense, and the participle and infinitive mood.

As the subject of the present chapter is the characteristic endings of persons and numbers, I should not have touched upon any thing which relates to the formation of tenses and moods, until I come to the proper place for that inquiry, had it not been for the circumstance that the personal endings themselves are different in the several modes of conjugation. As I wish to include the endings belonging to both systems, I found it necessary to explain, in the first place, the principle by which they are distinguished from each other. I shall now extract a table of the terminations belonging to each form as laid down by Dr. Grimm, beginning with the Mæso-Gothic verbs.

1. Strongly inflected conjugation of Mæso-Gothic verbs.

The following verbs will afford a specimen of this

^a This was observed by Hickes. See his Mæso-Gothic Grammar. Thesaur. Ling. Sept. tom. i.

inflection, and display in an interesting manner some of the oldest forms belonging to our own language or that of our Teutonic ancestors.

1. Slépa, I sleep; saizlêp, I slept; saizlêpum, we slept; participle, slêpans.
2. Láia, I laugh; lailô, laughed; láilôum; láians.
3. Svava, I swear; svôr, I swore; svôrum; svavans.

In this instance, and in the six last of the strongly inflected conjugations, the verb merely changes the radical vowel, and has no reduplication.

Paradigm of the personal endings of verbs of the strongly inflected conjugations.

	1. Person.	2. Person.	3. Person.
Indic. Pres. Sing.	-a	-is	-ith
Dual	-ôs	-ats	—
Plur.	-am	-ith	-and
Pret. Sing.	...	-t	...
Dual	-u (?)	-uts	—
Plur.	-um	-uth	-un
Subjunct. Pres. Sing.	-áu	-áis	-ái
Dual	-áiva (?)	-áits	—
Plur.	-áima	-áith	-áina
Pret. Sing.	-jau	-eis	-ei
Dual	-eiva	-eits	—
Plur.	-eima	-eith	-eina
Imperative Sing.	—	...	—
Dual	—	-ats	—
Plur.	-am	-ith	—

Infinitive -an; Participle, pres. -ands; Participle, pret. -ans.

N. B. The mark ... indicates that no additional ending is subjoined to the verb, and the mark — that the form for which it stands is wanting.

The following paradigm illustrates the weakly inflected conjugation, of which the verb *sôkjan* may serve as an example, *sôkjan* or *sôkyan* is *suchen*, to seek; *sôkja*, I seek; *sôkida*, I sought; *sôkjands* in the participle.

		1. Person.	2. Person.	3. Person.
Indicat. mood	} Pres. T.	Sing.	(vowel) -s	-th
		Dual	-ôs	-ts
		Plur.	-m	-th
	} Pret. T.	Sing.	-da	-des
		Dual	—	-dêduts
		Plur.	-dêdum	-dêduth
Subjunct. mood	} Pres. T.	Sing.	(vowel) -s	(vowel)
		Dual	—	-s
		Plur.	-ma	-th
	} Past T.	Sing.	-dêdján	-dêdeis
		Dual	—	-dêdéits
		Plur.	—	-dêdeina
Imperat. mood	}	Sing.	—	(vowel)
		Dual	—	-ts
		Plur.	-m	-th
Infinitive mood	}		-n	—
		Participle present,		-nds
		Participle past,		-ths

Next to the Mæso-Gothic Dr. Grimm has ranked in the affiliation of Teutonic languages the Old High German, the characteristics of which approach most nearly to those of the Gothic forms. Under this denomination of *Alt-hoch-deutsch* or Old High German, it must be observed that the remains of several dialects are comprised, which were nearly allied, but yet probably differed from each other in peculiarities now scarcely to be ascertained. Among these were the idioms of the Franks, Bavarians, and

Allemanni, and perhaps of other tribes between the seventh and eleventh centuries, of which specimens are preserved in the remains of Keros and Notker, and in the extant works of Ottfried. From these, and from some other relics of the period above mentioned, this ancient form of the High German language has been made up and restored by the accurate researches of Dr. Grimm.

Forms of the verb in the Old High German.

Forms of the strongly inflected conjugation.

		1. Person.	2. Person.	3. Person.	
Indicat. mood	}	Pres. T. Sing.	-u	-is	
		Plur.	-amês	-at	
	}	Past T. Sing.	...	-i	
		Plur.	-umês	-ut	
Subjunct. mood	}	Pres. T. Sing.	-e	-ês	
		Plur.	-êmês	-êt	
	}	Past T. Sing.	-i	-is	
		Plur.	-îmês	-ît	
	}	Imperative Sing.	—	...	
		Plur.	—	-at	
Infinitive	-an.	Part. pres.	-antêr.	Part. preter.	-anêr.

As an example of this conjugation we may take the following:

Slâfu, I sleep.

Slîaf, I slept.

Slîafumês, we slept.

Slâfanêr, having slept.

Paradigm of the weakly inflected verb of the Old High German.

		1st Person.	2d Person.	3d Person.
Indicat. mood	}	Pres. T. Sing.	-u (-m)	-s
		Plur.	-mês	-t
		Pret. T. Sing.	-ta	-tôs
		Plur.	-tumês	-tut
Subjunct. mood	}	Pres. T. Sing.	(vowel)	-s
		Plur.	-mês	-t
		Pret. T. Sing.	-ti	-tîs
		Plur.	-tîmês	-tît
	Imperative Sing.		—	(vowel)
	Plur.		—	-t
Infinitive -n.		Part. pres. -ntêr, -têr.		

Dr. Grimm has added an analysis of the grammatical forms in the other dialects belonging to the Teutonic family of languages, viz. the Old Saxon, the Anglo-Saxon, the Old Frisian, the Old Norse or northern dialect of the Voluspa and the Edda, the Middle High German, the Middle Netherlandish, the modern High German, the modern Netherland dialect, the modern English, the Swedish, and the Danish. The comparison of these varying forms of one original speech is extremely interesting to the philologist, and indispensable to those who wish to be thoroughly and fundamentally acquainted with the relations of our own mother tongue, but it would be foreign to my present design to pursue this subject further. I shall here add merely an outline of the personal endings of the Gothic and Old High German verbs in comparison with each other, confining myself to the present tense.

Personal endings of the Mæso-Gothic and Old High German verbs in the present tense.

1st Pers. Sing. a vowel, (often -a or -u,) or -ôm, or -êm.

2d Pers. Sing. -is, -ês, -ôs.

3d Pers. Sing. -ith, -it, -êt, -ôt.

1st Pers. Plur. -m, -am, -ames, -emes, -omes, &c.

2d Pers. Plur. -ith, -it, -et, -ôt.

3d Pers. Plur. -nd, -and, -ant, -ent, -ont.

Examples of these terminations which so much resemble the classical languages, and which are now lost to so great a degree in the Germanic dialects, occur in the following verses of a translation of that magnificent hymn of the ancient church, the *Te Deum*, which I copy from Hickes's *Thesaurus*.

- | | |
|-----------------------------------|-------------------------------|
| 1. Thih Cot lopemes, | Te Deum laudamus, |
| Thih Trutinan gehemes, | Te Dominum confitemur, |
| Thih euuigan Fater, | Te æternum Patrem, |
| Eokiueleih erda uuiridit. | Omnis terra veneratur. |
| 2. Thir alle engila, thir himila, | Tibi omnes angeli, tibi cœli, |
| Inti allo kiuualtido, | Et universæ potestates, |
| Thir Cherubim inti Seraphim | Tibi Cherubim et Seraphim |
| Unbilibanlicheru stimmo fo- | Incessabili voce proclamant, |
| raharent, | |
| 3. Uuiher, uuiher, uuiher, | Sanctus, sanctus, sanctus, |
| Truhtin Cot herro, | Dominus Deus Sabaoth. |
| Folliu sint himila inti erda | Pleni sunt cœli et terra |
| Thera meginchrefti tiurda | Majestate gloriæ tuæ. |
| thinera. | |

SECTION VI.

Personal endings of verbs in the Slavonian dialects and in the Persian language.

As the Slavonian dialects constitute one important branch of the European languages, they must not be entirely passed over in a treatise, the object of which is to point out and illustrate the relations of these idioms to each other. I shall, however,

confine myself to one dialect belonging to this division, and on this I shall touch but briefly. The following examples will afford my readers a specimen of the inflection of verbs in the Russian language, so far as the personal endings are concerned; and they will be sufficient to shew, that these terminations belong to the generally prevailing system which we have traced in other languages.

The Russian verbs are complicated in other respects, but their personal terminations present very little variety. In several tenses these endings are entirely wanting, and the personal pronouns alone distinguish the modifications of meaning; but the present tense has a perfect inflection. The following is the present tense of the verb *stoyu*, I stand^a.

Singular.	Plural.
1. <i>ya stoyu</i>	<i>mi stoim</i>
2. <i>ti stoish</i>	<i>vi stoite</i>
3. <i>on' stoit</i>	<i>oni stoyat.</i>

The following paradigm of the terminations of Russian verbs in the two forms which differ most widely from each other is given by Professor Vater in his excellent Russian Grammar.

First Form.	Fifth Form.
Singular.	Singular.
1. <i>-yu</i>	1. <i>-u</i>
2. <i>-esh</i>	2. <i>-ish</i>
3. <i>-et</i>	3. <i>-it.</i>
Plural.	Plural.
1. <i>-em</i>	1. <i>-im</i>
2. <i>-ete</i>	2. <i>-ite</i>
3. <i>-yut.</i>	3. <i>-yat^b.</i>

^a *Elémens de la Langue Russe* par M. Charpentier. Petersb. 1768. p. 148.

^b Dr. Johann Severin Vater's *Praktische Grammatik der Russischen Sprache*, p. 88.

The Persian verbs display the same general analogy; their terminations are even more nearly allied to those of the Teutonic verbs than the Slavonian. Of this the reader will judge from the present tense of the verb substantive, which is regarded as a model for the variations of the persons in all tenses.

Sing.	1. -am	2. -iy	3. -est
Plur.	1. -īm	2. -īd	3. -end.

The following is the preterite of the verb *buden*, and may serve as an example of past tenses in general.

Sing.	1. -budem	2. -budi	3. -bud
Plur.	1. -budim	2. -budid	3. -budend.

SECTION VII.

Terminations characterising the persons and numbers of verbs in the Celtic languages.

I now proceed to the personal endings of verbs in the Celtic language; and as they appear to have been preserved in a more complete state in the Welsh than in any other dialect of this language, I shall take the Welsh verbs at present as my principal subject. In the sequel, the formations peculiar to the Erse will be examined, and compared with those belonging to other idioms.

It has been observed, that the Teutonic verbs have only one form for the future and the present tense. The same remark applies to the Welsh; for the Welsh language, except in the instance of the verb substantive, which has two distinct forms, one for the present and the other for the future tense, has only one modification of the verb, which is used to represent both. In the German dialects the single form above

referred to is properly a present tense; but the Welsh grammarians consider that their language has only a future, and say that the future is put for the present. It is however used as such in cases where no license of expression or trope can have place, as in the Creed: "Credav yn Nuw Dâd," Credo in Deum Patrem.

The Welsh verbs present a considerable variety in their terminations, as the following examples will shew.

First Form, Future Tense, of the verb *caru*, to love.

Singular.	Plural.
1 carav	carwn
2 ceri, i. e. keri	cerwch
3 câr	carant

It must be noticed that the third person of the future tense is the root of the verb. The endings of the other persons are pronominal suffixes, as we shall clearly perceive in the sequel. The termination of the first person in *av* is equivalent to *amh*, or the *v* to a soft *m*. In the present tense of verbs in the Erse dialect the corresponding termination is always *aim* or *im*.

Second Form, Preterperfect Tense^a.

Singular.	Plural.
1 cerais	carasom
2 ceraist	carasoch
3 carodh	carasant

^a It may be worth while to add the same tense of the verb substantive, as it displays somewhat more strikingly the affinity of the Celtic to other European inflections.

1 bûm	fui	buom	fuiamus.
2 buost	fuisti	buoch	fuiistis.
3 bu	fuit	buont	fuerunt.

Third Form, Preterpluperfect Tense.

Singular.	Plural.
1 carwn	carem
2 carit	carech
3 carai	carent

The preterpluperfect caraswn changes its endings exactly as the foregoing.

There are some other varieties, an account of which will be given in a following chapter. It is only my object at present to deduce a general principle.

The following are the terminations. I begin with the plural, as presenting more regularity.

Plural Terminations.

1st Form.	2d Form.	3d Form.	4th Form.
1 -wn	-om	-em	-ym
2 -wch	-och	-ech	-ych
3 -ant	-ant	-ent	-ynt

The fourth column contains a modification used by the poets.

The terminations proper to the singular number are as follows:

1st Form.	2d Form.	3d Form.
1 -av	-ais	-wn
2 -i	-aist	-it
3 no addition } to the root. }	-odh ^b	-ai

It will be observed at once that there is sufficient resemblance between these inflections and those of other Indo-European languages to connect them indubitably with that class. This is particularly manifest in the plural endings. There are some apparent anomalies, but these will be explained in the sequel, and will be found illustrative of the general result to be deduced.

^b Note, *dh*, commonly written *dd*, is pronounced as *th* in other.

CHAPTER V.

Of the personal pronouns in the Indo-European languages, and of the derivation of the personal terminations of verbs.

SECTION I. Personal pronoun of the first person.

HAVING examined in the preceding chapter the systems of terminations which characterise the persons of verbs, I now proceed to compare with them the personal pronouns still extant in the same languages, and to shew that the endings of verbs which distinguish the persons and numbers are supplied by abbreviated forms of those pronouns subjoined to the verbal roots. In what degrees the pronouns belonging to each language have contributed to the formation of these endings or suffixes will appear in the course of the following investigation.

Personal pronoun of the first person in the Sanskrit, Greek, Latin, Russian, Mæso-Gothic, and Old High German languages.

SINGULAR.

Nominative.

अहम्—aham; ἐγὼν, ἐγὼ, ἰωγα, ἰωργα; ego; ya, Russ.; ik, Goth. ih, O. H. Germ.

Genitive.

मम—mama and मे—mai; μέθεν, ἐμέο, μοῦ; mei; menya, Russ.; meina, Goth.; mīn, O. H. Germ.

Dative.

माह्यम्—mahyam and मे—mai; ἐμὶν, ἐμοί, μοί; mihi; mne, Russ.; mis, Goth.; mir, O. H. Germ.

Accusative.

माम्—mām and मा—mā; ἐμὲ, μὲ, ἐμίν; me; menya,
Russ.; mik, Goth.; mih, O. H. Germ.

Ablative.

मत्—mat; ἀπ' ἐμοῦ; a, me, &c.

Instrumental.

मया—mayā; me, Lat.; mnoiū and mnoī, Russ.

Locative.

मयि—mayi; in me.

Præpositive.

mné, Russ.

DUAL.

Nominative.

आवाम्—āvām; ἄμμε, vāi, vā; vit, Goth.; wiz (?)
O. H. Germ.

Genitive.

आवयोस्—āvayōs and नै—nou; vōin, vōn; ugkara,
Goth.; unchar, O. H. Germ.

Dative.

आवाभ्यम्—āvābhyam, नै—nou; vōin, vōn; ugkis,
Goth.; unch, O. H. Germ.

Accusative.

आवाम्—āvām and नै—nou; ἄμμε, vāi, vā; ugkis,
Goth.; unch, O. H. Germ.

Ablative and Instrumental.

आवाभ्याम्—āvābhyām.

Locative.

आवयोस्—āvayōs.

PLURAL.

Nominative.

वयम्—vayam; ἄμεις, i. e. vames, ἡμέεις, ἡμεῖς; nos;
mi, Russ.; veis, Goth.; wîr, O. H. Germ.

Genitive.

अस्माकम्—asmākam; ἄμῶν, ἡμῶν; nas, Russ.; unsara, Goth.; unsar, O. H. Germ.; our.

Dative.

अस्मभ्यम्—asmabhyam, नस्—nas; ἄμῖν, ἡμῖν; nobis; nam, Russ.; unsis, Goth.; uns, O. H. Germ.

Accusative.

अस्मान्—asmān, नस्—nas; ἄμμας, ἡμέας; nos; nas, Russ.; unsis, (uns,) Goth.; unsih, Old H. Germ.

Ablative.

अस्मात्—asmāt; ἀφ' ἡμῶν; à nobis.

Instrumental.

अस्माभिस्—asmābhis; nobis; nami, Russ.

Locative.

अस्मासु—amasu; in nobis.

Præpositive Case.

nas, Russ.

Note. An attentive examination will enable the reader to ascertain, that, notwithstanding the great variety of these pronouns and their inflections, a few common elements are the foundation of them all. A satisfactory analysis of the Sanskrit pronoun has been given us by Professor Bopp, who has dissected the elements which enter into its declension with his usual ingenuity and discernment. His object is the Sanskrit pronoun, but his remarks may tend to elucidate the corresponding forms in all the cognate languages. He observes that the Sanskrit aham, ego, which is quite unconnected with its oblique cases, consists of two elements, viz. अह, AH and अम, AM; the latter is a mere termination, occurring as such in other pronouns: AH is the root. Compare it with ih, ik, ek, ego, h being considered as a guttural consonant. The oblique cases in the Sanskrit pronoun

are derived from two similar roots म—ma and मे—mai, which, however, have no existence as distinct words in the Sanskrit language. We may observe that from a root allied to the last, the oblique cases in the European languages are formed. This root is not to be found as an independent word, or as a nominative case in any of those idioms of which the pronouns have been hitherto compared. We shall discover it in the Celtic.

The plural nominative is वे—*vai*, prefixed to the above-mentioned termination *am*. The plural oblique cases come from an etymon common to all these languages, but not existing in any of them as a distinct word. From it we derive the Russian *nas*, and *noi* and *nos* in Greek and Latin. We shall find this etymon to be the Celtic nominative plural. *Asman* and *āsmu* (originally *āsmu*, as also *ūsmu* was *ūsmu*?) contain an epenthesis of *sma*.

M. Bopp supposes the endings of the cases to have been formed by involved prepositions; as *asmabhis*, *nobis*, from the Sanskrit preposition *abhi*, added to the elements of the word. The same termination is to be traced in the Latin *nobis*, and perhaps in the Greek *ἡμῖν*, which may have been originally *ἡμιφῖν* or *ἀμμιφῖν*. On this subject M. Bopp refers to a dissertation of his own on the origin of cases, in the *Abhandlungen der Historisch-Philologischen Klasse der K. akad. der Wissenschaften*, (viz. at Berlin,) ann. 1826.

SECTION II.

Pronoun of the second person.

SINGULAR.

Nominative.

त्वम्—*tuam* or *twam*; *τὸ, σὺ, τὴν*; *tu*; *tü*, Russ.;
thu, M. Goth.; *dû*, O. H. Germ.

Genitive.

तव—*tava* or ते—*tai*; *τέο, τεῦς, σέο, &c.*; *tui*; *tebyà*,
 Russ.; *theina*, Goth.; *dîn*, O. H. Germ.

Dative.

तुभ्यम्—tubhyam and ते—tai; τῖν, τῆν, σοί; tibi;
tebé, Russ.; thus, Goth.; dir, O. H. Germ.

Accusative.

त्वाम्—tuām and त्वा—twa; τὸν, σέ; te; tebya,
Russ.; thuk, Goth.; dih, O. H. Germ.

Ablative.

त्वत्—tuat; a te.

Instrumental.

त्वया—twayā; te; toboyu, toboi, Russ.

Locative.

त्वयि—tuayi.

Præpositive.

tébé, Russ.

DUAL.

Nominative.

युवाम्—yúvām; ὕμμε, σφῶϊ, σφῶ; yut, (?) Goth.; yiz.
iz, (?) O. H. Germ.

Genitive.

युवयोस्—yuvayōs, वाम्—vām; ïgqvara, Goth.;
inchar, O. H. Germ.

Dative.

युवाभ्यम्—yuvābhyam, वाम्—vām; ὕμμε κ. τ. λ.
ïgqvis, Goth.; inch, O. H. Germ.

Accusative.

Sanskrit and Greek the same as the nom.; Gothic
and Old High German the same as the dative.

Ablative and Instrumental.

युवाभ्यम्—yuvābhyam.

Locative.

युवयोस्—yuvayos.

PLURAL.

Nominative.

युयम्—yúyam; ὕμεις, ὕμεῖς, κ. τ. λ.; vos; vü, Russ.;
yus, Goth.; ír, O. H. Germ.

Genitive.

युष्माक्म्—yushmākam and वस्—vas; ὑμέων, ὕμων;
vostrum, vestrum; vas, Russ.; izvara, Goth.;
iwar, O. H. Germ.

Dative.

युष्मभ्यम्—yushmabhyam, वस्—vas; ὑμῖν; vobis;
vam, Russ.; izvis, Goth.; iu, O. H. Germ.

Accusative.

युष्मान्—yushmān, वस्—vas; ὑμέας, ὕμᾱς; vos;
vas, Russ.; izvis, Goth.; iwih, O. H. Germ.

Ablative.

युष्मत्—yushmat; a vobis.

Instrumental.

युष्माभिस्—yushmābhis; vobis; vami, Russ.

Locative.

युष्मासु—yushmāsu.

Præpositive.

vas, Russ.

Note. The pronouns of the second person are susceptible of an analysis similar to that of the preceding, as may be seen by the reader of Bopp's critical observations on these pronouns in his Sanskrit Grammar. The cases of the singular number are formed from the elements तु—tu, (as nominative twam or tu-am,) and त्व—tua, or त्वे—tuai. The dual cases are formed from युव, yuva, and agree in terminations with those of the pronoun of the first person. The plural cases are formed from यु—yu, and from वस्, vas, or vos.

SECTION III.

Pronouns of the third person.

The pronouns of the third person are still more varied and numerous in their inflections than the preceding. The personal pronouns of the third person, which are properly so termed, and chiefly in use as such, appear to have little or no relation either to the corresponding personal pronoun in Sanskrit, or to the personal endings of verbs. But there are some other words in these languages, which, though chiefly used as demonstrative pronouns or definite articles, appear to have been originally personal pronouns. For example, the definite article in Greek was used, as Matthiæ has observed, for *αὐτός*, and was in fact a pronoun. It bears also in its forms a near analogy to the Sanskrit personal pronoun. The Gothic demonstrative pronoun or article *SA, SO, THATA* is closely allied to both of these, and all the three were apparently the same word very slightly modified. The Latin pronoun approaching most nearly to these is *ISTE*. I shall collate the forms of all of them, that the reader may perceive their affinities. It must be observed, that the chief reason for selecting these rather than any other pronouns of the third person is the circumstance, that the verbal endings of the third person which have been traced in the preceding chapter are perhaps formed by suffixes, or abbreviations of them, and are quite unconnected with those personal pronouns, which in the actual state of the respective languages are more regularly used as such.

Matthiæ has conjectured that the primitive form of what is called the definite article in Greek was *τὸς, τῇ, τὸ*: but the analogy of permutations indicates

the aspirate to have taken place rather of a sibilant than of a dental, and it is probable that $\sigma\delta\varsigma$, $\sigma\grave{\alpha}$, $\tau\grave{o}$, was the form which preceded the present one. Yet the sigma is peculiar to the masculine and feminine nominative, and the real etymon of the pronoun must have been in Greek similar to the root which exists in Sanskrit and the other cognate languages. तत्—tat, is the nominal root, as given by grammarians, but the real etymon, as Professor Bopp has observed, must have been त—ta, and त—ta, $\tau\grave{o}$, te, and tha seem to have been the roots in the Sanskrit, Greek, Latin, and Teutonic languages. Iste is probably a compound word formed of is the personal pronoun and an old demonstrative, strikingly analogous to the Sanskrit personal pronoun.

SINGULAR.

Nominative.

	Masculine.	Feminine.	Neuter.
Sanskrit	$\left\{ \begin{array}{l} \text{सस्—sas,} \\ \text{or} \\ \text{सः—sah.} \end{array} \right\}$	सा—sā	तत्—tat
Greek	\acute{o} or $\sigma\delta$	η or $\sigma\grave{\alpha}$	$\tau\grave{o}$
Gothic	sa	so	thata
O. H. G.	dër	diu	daz
Latin	is-te	is-ta	is-tud

Genitive.

Sanskrit	तस्य—tasya	तस्यास्—tasyās	तस्य—tasya
Greek	$\tau\omicron\iota\omicron$, $\tau\omicron\upsilon$	$\tau\acute{\alpha}\varsigma$, $\tau\eta\varsigma$	$\tau\omicron\iota\omicron$, $\tau\omicron\upsilon$
Gothic	this	thizôs	this
O. H. G.	dës	dërâ	dës
Latin	istius	istius	istius

Dative.

Sanskrit	तस्मै—tasmoi	तस्यै—tasyoi	तस्मै—tasmoi
Greek	τῷ (τῶι)	τῷ, τῇ, (τῶι)	τῷ (τῶι)
Gothic	thamma	thizái	thamma
O. H. G.	dëmu	dëru	dëmu
Latin	isti	istæ (istai)	isti

Accusative.

Sanskrit	तम्—tam	ताम्—tām	तत्—tat
Greek	τὸν	τῇν, τὰν	τὸ
Gothic	thana	thô	thata
O. H. G.	dën	dia	daz
Latin	istum	istam	istud

Ablative.

Sanskrit	तस्मात्—tasmāt	तस्यास्—tasyās	तस्मात्—tasmāt
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Instrumental.

Sanskrit	तेन—taina	तया—tayā	तेन—taina.
Latin	isto	istā	isto

Locative.

Sanskrit	तस्मिन्—tasmin	तस्याम्—tasyām	तस्मिन्—tasmin
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DUAL.

Nominative and Accusative.

Sanskrit	तौ—tou	ते—tai	ते—tai
Greek	τὼ	τὰ	τὼ

Genitive and Dative in Greek.

Instrumental, Dative, and Accusative in Sanskrit.

Sanskrit	ताभ्याम्—tabhyām	_____	_____
Greek	τοῖν	ταῖν	τοῖν

PLURAL.

Nominative.

Sanskrit	ते—tai	तास्—tās	तनि—tani
Greek	oi (oi)	ai (ai)	ra
Gothic	thái	thôš	thô
O. H. G.	diê	diô	diu
Latin	isti	istæ	ista

Genitive.

Sanskrit	तेषाम्—taishām	तासाम्—tāsām	तेषाम्—taishām
Greek	roiv	roiv	roiv
Gothic	thizê	thizô	thizê
O. H. G.	derô	dero	dërô
Latin	istorum (istosum)	istarum (istasum)	istorum (istosum)

Dative.

Sanskrit	तेभ्यस्—taibhyus	ताभ्यस्—tābhyus	तेभ्यस्—taibhyus
Greek	rois	rais	rois
Gothic	thaim	thaim	thaim
O. H. G.	dêm	dêm	dêm
Latin	istis (istobus)	istis (istabus)	istis (istobus)

Accusative.

Sanskrit	तान्—tān	तास्—tās	तनि—tani
Greek	rois	rais	ra
Gothic	thans	thôš	thô
O. H. G.	diê	diô	diu
Latin	istos	istas	ista

Ablative in Sanskrit same as Dative.

Instrumental.

Sanskrit	तैस्—tois	ताभिस्—tabhis	तैस्—tois
Greek	rois	rais	rois
Latin	istis	istis (istabus)	istis

Locative.

Sanskrit	तेषु—taishu	तासु—tāsu	तेषु—taishu.
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SECTION IV.

General observations on the preceding facts.

It will be apparent on a survey of the foregoing table, that the pronouns of the third person bear as near a relation to each other, in the several languages compared, as do those of the first and second. These relations, as well as the analogies discoverable in the former tables, are chiefly evident in the oblique cases, though by comparing the nominatives merely they might be recognised.

But in the multiplicity of terminations which the declension of these pronouns displays, it will be in vain to look for the pronominal suffixes of the system of verbs. The variety of endings precludes the hope of any certain discoveries in this respect. And if we confine our examination to the nominative cases of the pronouns, which alone can be taken into the account with strict propriety, we find only one which contains exactly the ending connected with the personal verb. In all the languages compared in the preceding tables, the termination of the first person plural is in *amus*, *ames*, *ame*, or *am*. This in the older forms of the Greek language is the pronoun of the corresponding person. If in other instances such a correspondence were discoverable, the problem which refers to the actual origin of the verbal inflections would be solved. But this unfortunately is not the case; and hence many philological writers and grammarians still deem it uncertain on what principle these varieties in the endings of the verb were really formed; and those who consider them as dependent upon pronominal suffixes have been rather inclined to lay down this position as a probable one, than as established by decisive proofs.

In this state of the question it is fortunate that there is one idiom in which the personal pronouns, as well as the verbal suffixes, have been preserved in a form apparently much less altered from their original one, than in any of the more celebrated and classical dialects, in which philologists have in general sought the means of elucidating the structure of language. I allude to the Celtic dialects, and particularly to that still spoken by the Welsh people, but which is found in a much more perfect state in the productions of British writers coeval with, or even of greater antiquity than the oldest compositions of the Anglo-Saxons. The preservation of the pronouns in the Welsh language during so long a period of time has perhaps resulted from the circumstance, that in that idiom they are undclinable words, whereas in most of the European dialects they are susceptible, as we have seen, of copious inflection and variety of endings. The terminations of words in general are but little capable of change in the Celtic idioms, as indeed are those idioms themselves, of which the people appear ever to have been remarkably tenacious. It would perhaps not be going too far to say, that no language in Europe has undergone so little change in an equal space of time as the Welsh sustained during the centuries which intervened between Aneurin and Lhywarch and the period when the sacred scriptures were translated into it. To whatever circumstances the fact is to be attributed, it seems to be certain, as I hope to make it sufficiently apparent, that the Celtic idioms preserve, in a more perfect state than any other languages of Europe or Asia,

the original pronouns of which abbreviated forms enter as suffixes into the inflections of verbs through the numbers and persons.

That the resources afforded by the Celtic dialects have not yet been applied to the elucidation of grammatical forms in the European languages in general, has arisen, as I apprehend, from the fact that inquiries of this description have been pursued chiefly by German scholars, who, owing to local circumstances, have been little acquainted with these provincial idioms of the British isles. It will be my endeavour, in the course of the following investigation, to supply the deficiency ; but before I enter upon this part of my task, I shall beg leave to set before my readers some passages from Professor Grimm's *Analysis of the Teutonic Languages*, in order to shew how far the inquiry respecting the origin of verbal inflections has already advanced, and what remains to be done, or to be attempted.

The characteristic terminations of person and number in the Teutonic verbs, which, as we have seen, have such endings closely analogous to those of other European languages, are thus deduced by Professor Grimm.

The ending of the first person singular seems, as he observes, to have been originally *M*. This, however, is in many instances defective, and has been more lately softened into *N*. The second person singular is characterized by a final *s* ; the third person by *TH*.

The first person plural added originally to the final *M* of the singular number an *s*, (with a vowel interposed,) which however was gradually dropped.

The second person plural had TH, like the third person singular, adding perhaps an s, (with an interposed vowel,) which was afterwards rejected.

Lastly, the third person plural had ND, of which the D again is in many instances defective.

The dual seems originally to have had vs in the first person, and Ts in the second, and in the third to have been wanting.

The imperative mood in the strongly inflected conjugation entirely rejects any personal inflection, and it makes the second person dual and plural, as well as the first person plural, perhaps also the first person dual, like the indicative, while it always wants the first and third person singular. The characteristic of the infinitive mood is the consonant N, which however is wanting in several dialects. It may be remarked, that the indicative mood has the personal characteristics in a more complete state than the conjunctive mood, and the present tense than the preterite tense. Moreover, the first and third persons of the preterite invariably want the characteristic consonant, and the D subjoined to the N of the third person plural in the present tense is wanting in the preterite, the modification already induced in the verb itself, in the formation of the preterite tense, being sufficient for distinguishing the sense in conversation^a.

In another part of his work the same writer makes the following observations, with a view to elucidate, as far as the languages within his scope would afford opportunity, the origin of these inflections.

He says, "The personal characteristics in the

^a Grimm's Deutsche Grammatik. th. i. p. 835—6.

conjugation of verbs allow of a satisfactory comparison with the personal pronouns, the relations of which are blended in the idea of the verb. Something is really explained by this comparison. Some parts of the personal pronoun destitute of gender offer themselves in a striking manner : what is less obvious we must endeavour to restore from the corrupt state partly of the pronoun, and partly of the verbal inflection, the variations of which have been for an indefinite time increasing each in its own way, without regard to the original connection between them. Sometimes the forms of the pronoun^b may be conjectured from the verb, and sometimes those of the verb from the pronoun ; the third person is for obvious reasons the most obscure, of which the pronoun destitute of gender has undergone the greatest change, has become defective in some cases, and in some instances has been entirely lost, while the pronoun of the third person having gender shews no relation to the verbal inflection. The characteristic terminations of the third person, singular and plural, viz. D and ND, *appear to me quite inexplicable by means of the German pronouns*. The M of the first person singular is more tractable. From pentamês in the first person plural I infer a more ancient MEIS, instead of the Old High German VEIS, and trace from MEIS, MIS, WIS, WIR. The termination of the second person in TH is clearly related to the pronoun THU, and affords room for conjecturing an older, thjus, (thyûs,) instead of jus, for the second person plural. Lastly, the characteristic endings of the dual v and TS have

^b The difficult anomalies of which are observed in page 813 of Grimm's Grammatik.

a relation to the dual pronominal forms vit and jut, (originally juts). The examination of foreign languages anciently connected will help to support these conjectures^c.

I shall examine whether this subject will admit of further elucidation from the extant forms of the Celtic verbs and pronouns.

SECTION V.

Of the Celtic pronouns.

The Celtic dialects, having no declension of the pronouns, properly so termed, supplies the deficiency in a manner similar to that adopted in the Hebrew and other cognate languages. They have two series of personal pronouns, the distinct or entire pronouns, which are chiefly used as nominative cases, or as accusatives after verbs, and a class of abbreviated pronouns used in regimen particularly after prepositions, and answering the purpose of the oblique cases of pronouns in other languages. I shall first give a table of the entire pronouns, as they exist in both of the principal branches of the Celtic language.

PARAGRAPH 1.

Entire personal pronoun in the Erse.

The entire personal pronouns in the Erse are as follows :

First Person.

Me, I or me.

Sinn, we ; inn, secondary form, the initial s being changed for h and at length omitted^b.

^c Grimm, p. 1052.

^b In chap. i. sect. 1. the reader will find an explanation of what is meant by the secondary forms of initial consonants.

Second Person.

Tu, thou ; thu, i. e. t'hu, secondary form

Sibh, you ; ibh, secondary form.

Third Person.

Singular Masculine.

Se, he ; e, secondary form.

Singular Feminine.

Si, she ; i, secondary form.

Plural Common.

Siad, they ; iad, secondary form.

PARAGRAPH 2.

Entire pronouns personal in Welsh.

First Person.

Mi, I ; reduplicate form, myvi, ἐμύγιε ; secondary form of initial, vi and i.

Ni, we ; reduplicate form, nyni.

Second Person.

Ti, thou ; reduplicate form, tydi ; secondary form of initial, di and thi.

Chwi, you ; reduplicate form, chwychi.

Third Person, Masculine Singular.

Ev, eve, evo, ve, vo, e, o.

All these various words occur for he and him.

Note. The Welsh translators of the holy Scriptures considered *eve* as a nominative case preceding the verb, and they used *ev* for the accusative ; but in this they are said by the most learned of the Welsh grammarians to be in opposition as well to the common usage of the Welsh language as to the authority of the old poets ^b.

^b *Antiquæ Linguae Britannicæ Rudimenta*, auctore Joh. Davies. Editio altera, Oxonii, 1809. p. 84.

With more probability, *eve* and *evo* have been considered by grammarians as reduplicate forms, the simple pronoun being *ev*, or rather *e*. Analogy leads us to suppose that the original state of this pronoun was in Welsh as it is in Erse, *se*, and, the initial being softened, *he*, which was afterwards written *e*.

Feminine Singular.

Hi, she ; reduplicated, *hihi*.

Note. The same rule of analogy above referred to proves that *hi* was derived from a primitive form *si*, whence *hi*, as in Erse.

Plural Common.

Hwy and *hwynt* ; reduplicate form, *hwynt hwy*.

Note. There is reason to suspect that *hwy* and *hwynt* were in like manner originally *swy* and *swynt*, though this ancient form is no longer extant even in Erse. But of this there is no proof, but that which is afforded by analogy.

PARAGRAPH 3.

Pronouns in regimen or Pronominal Suffixes.

Such is the entire and proper form of the personal pronouns in the Celtic dialects, and they probably represent a very old or the primitive state of these parts of speech in the Indo-European languages. It may indeed in many instances be observed, that the Celtic pronouns are the nominatives from which the oblique cases in those languages may be regularly formed, whereas these cases, in several examples that might be adduced, have little or no affinity to the vocables which now stand to them in the relation of nominatives. The real nominatives appear to have been lost, and other words substituted in their places, but in the Celtic, which has no declension of pronouns, the original forms, perhaps in consequence of this very circumstance, have been preserved.

But besides the series of forms above given, the pronouns in the Celtic language are also found in a state considerably modified by composition or construction with other words. The preceding are all separate and complete words by themselves; those to which I now allude are abbreviated, or modified and affected in orthography by the words which are immediately prefixed. I shall shew this by examples, and take, in the first place, the pronouns as governed by and blended with some of the prepositions^c.

The following are the forms in which the personal pronouns appear when following the preposition *at*, to.

mi or vi	} is changed into	av	as attav, to me.
ti or di		at	attat, to thee.
evo		aw and	attaw
hi		o	atto } to him.
ni	} becomes	i	atti, to her.
chwi		om	as attom, to us.
hwynt		och	attoch, to you.
		ynt	attynt, to them.

The preposition *tan*, under, changes them in a similar manner, as

1 tanav	tanom.
2 tanat	tanoch.
3 tano and tani	tanynt.

Rhwng, between changes them as follows :

1 rhyng-ov	rhyng-om.
2 rhyng-ot	rhyng-och.
3 { rhyng-dho	rhyng-dh-ynt or
{ rhyng-dhi	rhyng-th-ynt.

^c In what remains to be said on the subject of the pronouns, I shall, to avoid perplexity, confine myself to the Welsh dialect of the Celtic, premising that in the Erse dialect very nearly the same facts are to be observed.

Yn, in, changes them thus :

ynov, in me.	ynom, in us.
ynot, in thee.	ynoch, in you.
yntho, or yndho, }	{ ynthynt, or yndhynt, in them.
ynthi, or yndhi, }	
	{ in him.
	{ in her.

Trwy, through, alters them thus :

trwyov,	trwyom.
trwyot,	trwyoch.
trwydho }	trwydhynt.
trwydhi, }	

Wrth, by, thus :

wrthyv,	wrthym.
wrthyt,	wrthych.
wrtho, }	wrthynt.
wrthi, }	

The preceding are all very analogous, but another form occurs in the combination of the pronouns with the preposition i, to, of which it is important to take notice.

1. im' or ym', to me.	in' or yn', to us.
2. it' or yt', to thee.	iwch, to you.
3. idho, to him.	idhynt, to them.
idhi, to her.	

Nor are these mutations of the personal pronouns confined to the instance of their combinations with prepositions. They are thus compounded with the possessive pronoun or adjective eidho, own.

eidhov, my own.	eidhom, our own.
eidhot, thy own.	eidhoch, your own.
eidho, his own.	eidhont } eidhynt } their own.
eidhi, her own.	

The Welsh grammarians deduce analytically the

But besides the series of forms above given, the pronouns in the Celtic language are also found in a state considerably modified by composition or construction with other words. The preceding are all separate and complete words by themselves; those to which I now allude are abbreviated, or modified and affected in orthography by the words which are immediately prefixed. I shall shew this by examples, and take, in the first place, the pronouns as governed by and blended with some of the prepositions ^c.

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Yn, in, changes them thus :

• ynov, in me.	ynom, in us.
ynot, in thee.	ynoch, in you.
yntho, or yndho, } in him.	{ ynthynt, or yndhynt, in them.
ynthi, or yndhi, } in her.	

Trwy, through, alters them thus :

trwyov,	trwyom.
trwyot,	trwyoch.
trwydho } trwydhi, }	trwydhynt.

Wrth, by, thus :

wrthyv,	wrthym.
wrthyt,	wrthych.
wrtho, } wrthi, }	wrthynt.

The preceding are all very analogous, but another form occurs in the combination of the pronouns with the preposition *i*, to, of which it is important to take notice.

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eidhot, thy own.	eidhoch, your own.
eidho, his own.	{ eidhont eidhynt } their own.
eidhi, her own.	

The Welsh grammarians deduce analytically the

following series of forms under which the personal pronouns occur when thus modified by the preceding words.

mi	} becomes	av, ov, yv, or m'.
ti		at, ot, yt, or t'.
evo		aw, o, or dho.
hi		i or dhi.
ni		om, ym, or n'.
chwi		och, ych, or ch.
hwynt		ynt, sometimes dhynt.

The reader can hardly fail to be struck with the very obvious relation which discovers itself between this series of pronouns and the personal endings of the Welsh verbs, of which the different forms were given in the preceding chapter. The comparison of the two tables will at once prove that the terminations of the verbs are in fact a series of pronominal suffixes, and the problem which regards the origin of these personal inflections may be considered as solved, in so far as it regards the Welsh and the other dialects of the Celtic language. There is indeed in Welsh a considerable variety in the personal terminations of the verbs, and this may be supposed with probability to have been a consequence of the poverty of the Celtic language in respect to the conjugations in temporal and modal inflections, or in those changes by which the differences of mood and tense are indicated. In these modifications the Celtic has fewer resources than many other languages; and it was probably found necessary to supply the deficiency by a considerable variety in the personal endings, which in some measure help to characterise the tenses. There is not, however, in these a greater diversity than among

the abbreviated pronouns, and nearly all the verbal terminations are to be found in the preceding table. This I shall now shew by a comparison of the verbal endings with the pronouns.

PARAGRAPH 4.

Comparison of the personal endings of verbs with the contracted forms of the pronouns.

It may be remembered that in a former section the personal endings of the verbs in the Welsh language were said to be reducible for the most part to four, or rather three principal forms. These are as follows :

First form.	Second form.	Third form.
Sing.	Sing.	Sing.
1. -av	-ais	-wn
2. -i	-aist	-it
3. root simply	-odh	-ai.
Plur.	Plur.	Plur.
1. -wn	-om	-em or ym
2. -wch	-och	-ech or ych
3. -ant	-ont	-ent or ynt.

If the reader will only compare this table with that of abbreviated pronouns contained in the end of the last paragraph he will perceive at once their relation.

The plural terminations are precisely the pronouns. The first set presents the greatest variety, but even these are traced among the pronouns ; in' or yn' and iwch, being the forms which the pronouns ni and chwi assume after the proposition i. The first of these, in' or yn', seems a more natural change of ni, than the more usual om or ym, which is so re-

following series of forms under which the personal pronouns occur when thus modified by the preceding words.

mi	} becomes	av, ov, yv, or m'.
ti		at, ot, yt, or t'.
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mote from *ni* as to give rise to a suspicion that the Welsh language had once a pronoun resembling the *ἄμε* or *ἄμες* of the Greeks, and that this has been lost, notwithstanding the permanent character of the Celtic dialects.

The personal endings in the singular number are more various, but they are still analogous to the abbreviated pronouns. In the first form for example, which is that of the future or present tense, the first person has the ending in *av*, which the pronoun *mi* or *vi* generally assumes in regimen, as above shewn. The *ais* of the second form is not pronominal, but an inflection characteristic of the tense, the syllable *ais* or *as* being introduced in the past tenses of the Celtic verb, nearly as the *od* or *ed* in the Teutonic conjugations; it is brought in before the pronominal termination, as in the plurals *carasom*, *carasoch*, *carasant*. The second person, in two out of the three forms, has the abbreviated pronoun as a suffix, either in *it* or *t*. In the first form, the ending *i*, though it does not appear among the abbreviated pronouns, is the termination of the separate pronoun of the second person, and this is therefore probably a suffix. The third person is differently constituted. In the first form of the verb, as in *carav*, *ceri*, *câr*, from the word *caru* to love, or in *bydhav*, *bydhi*, *býdh*, from the verb substantive, the third person is merely the verbal root used, as in the Semitic languages, without any suffix. In the third form *ai* was perhaps *ae*, and derived from *eve*, or its modification as used in regimen *é*. The ending in *odh* seems anomalous in the Welsh language, though it nearly resembles the termination of the third person

in other idioms, as the Teutonic *aith*, or *ot*^a. The Welsh suffix, if formed regularly from the pronoun, would be in *o* or *aw*; and this actually occurs in the future tense of the subjunctive mood, which does not fall under either of the forms above stated, but has the singular number thus:

1. *bydhwyt*, 2. *bydhych*, 3. *bydho*.

PARAGRAPH 5.

General result in respect to the Celtic verbs.

On a review of this analysis it appears clearly that the Welsh verbal terminations are in general merely abbreviated or modified pronouns, affixed to the verbal roots; and this conclusion does not rest merely upon a probable conjecture, on which the grammarians of other Indo-European languages have been obliged to found it, but on the more substantial fact, that the very terminations in question are actually to be identified with the pronouns as they are used on other occasions in an abbreviated form.

SECTION VI.

Conclusions respecting the personal inflections of verbs in the other Indo-European languages.

As it has been, I trust, satisfactorily proved that the inflection of verbs in the Welsh language consists in the addition of pronominal suffixes to the verbal roots, and as in a former section sufficient evidence appeared, of the affinity and original sameness of the verbal inflections in all these languages, we are entitled to infer without hesitation, that in the other

^a Is it the abbreviated form of the pronoun (*dho*) reversed?

languages which belong to this stock, the verbs are inflected on the same principle, and that although in many instances they are no longer extant, pronouns formerly existed in all these idioms more or less analogous to the Welsh pronouns.

It will be worth while to go a little more minutely into this consideration.

1. The pronoun of the third person plural in Welsh is *hwynt* in the entire form, and *ynt* in the contracted one, which as a verbal suffix is *ynt*, *ent*, *ont*, *ant*. In the other languages the terminations of the verb are as follows :

In Greek, *οντι, εντι, αυ, οντο, κ. τ. λ.*

In Sanskrit, *anti, unt, an.*

In Latin, *ant, ent, unt, anto, ento, &c.*

In Teutonic, *and, aina, ont, ant, on, &c.*

These languages have no personal pronoun now extant similar to *hwynt* or *ynt* ; but, from the considerations above adverted to, it is probable that such a pronoun existed in them.

2. The Welsh separate pronoun of the first person plural is *ni*, which is to be recognised in other languages in the oblique, if not in the nominative cases^b. The contracted form of this pronoun in *n'* enters into some of the Welsh tenses as a suffix, but most of them have the other Welsh pronoun of this person, *om* or *ym*. This, as we have observed, can scarcely be derived from *ni*, but rather comes from some separate pronoun originally common to all

^a Viz. in Sanskrit, नौ—*nau*.
 in Greek, *νῶϊ*
 in Latin, *nos*
 in Russian, *nas*.

these languages, which must have been analogous to the Greek *ἄμε* or *ἄμες*, or perhaps a plural formed from the nominative singular *mi*. However this may have been, the termination, *am*, *em*, *ym* is really a contracted pronoun in the Welsh language, and must have existed as such in the cognate idioms. The following endings may therefore be regarded as pronominal suffixes :

In Greek, *αμες, ομες.*

In Sanskrit, *amah, or amas, am.*

In Latin, *amus, emus, imus, umus.*

In Teutonic, *ames, omes, aima, am.*

3. The separate pronoun of the second person plural in Welsh is *chwi*, and the abbreviated one *och* or *ych*, which, as we have seen, is also the suffix in the endings of verbs for this person. All the other Indo-European languages have a dental consonant in the place of the Welsh guttural or palatine letter, as in the

Teutonic dialects, *aith, ith, uth, ot, et.*

In Sanskrit, *at'ha, t'ha, or tã.*

In Greek, *ατε, ετε, τε,*

In Latin, *atis, ate, etis, ete, itis, ite.*

What the separate pronoun was in these languages from which the termination of the verb is contracted, we can scarcely hope to discover ; but the fact being proved that the Celtic verb is here formed by means of a pronominal suffix, we may infer from analogy that the same construction holds in the other languages.

4. We have seen that the separate pronoun of the first person singular in Welsh is *mi* or *vi*, and the

constructive pronoun *av*, *ov*, *yv*, or *m'*. The verbal suffix is *av* or *yv*: in the Erse dialect it is *am*, *aim*, or *im*. In most other languages *m* is the characteristic consonant of this person, with or without a subsequent vowel, as,

In Greek, *μι*, as *εἰμι*, *τίθημι*.

In Sanskrit, *mi*, or *m*, as *bhavami*, *abhavishyam*.

In Latin, *m*, as *inquam*, *sum*, *amabam*.

Although the pronouns extant in these languages do not come so near to the above terminations as the Welsh *mi*, *vi*, and *m'*, still they may account for it tolerably well.

In Greek and in Latin, the *ἐγώ* or *ego* probably gave rise to the ending of verbs in *o*, which is perhaps a later form than the termination in *mi*.

In other instances the first person singular has no addition to the simple verb, or to the common characteristic of the tense. The verb was used in this state either with the separate pronoun or without any. The other persons are marked by characteristic additions, and it was sufficient for the first to be without any suffix. But while the Teutonic dialects have the first person in this state, the Celtic dialects, like the Semitic languages, have the third person most frequently in the simple state, or in that which is nearest to the verbal root.

^b This is contrary to the opinion of some eminent grammarians, who regard the form in *μι* as more recent than that in *ο*. Before this opinion can be allowed to be probable, some answer must be given to the question, How it can have happened that the newer forms in the Greek language should resemble those of the Sanskrit so much more than the older ones, as they would do on the hypothesis?

5. The second and third persons singular end as follows.

	Second person.	Third person.
Greek,	$\sigma\iota$ or ς ,	$\tau\iota$, $\tau\acute{o}$, or $\epsilon\iota$.
Sanskrit,	si or s,	ti, or t.
Latin,	s.	t.
Teutonic,	ais, is, es.	eith, eth, t.

Here there seems to be, at the first view of the subject, an interchange of pronouns; for the pronoun of the second person, in its usual state, was in all these languages nearly the same as in Welsh. It was $\tau\acute{u}$, tu, twăm, (i. e. radically tu,) thu, in Greek, Latin, Sanskrit, and Gothic respectively: and the pronoun of the third person is sah, and sa in Sanskrit and Gothic. But we may observe in the first place that the original form of the third person was in all these languages $t\check{o}$, $t\check{a}h$, te, or at least a t with a vowel adjoined. This is indicated by the analogy of the neuter gender and the oblique cases. The Greek was originally,

	$\tau\acute{o}\varsigma$,	$\tau\acute{\alpha}$,	$\tau\acute{o}$.
The Latin with <i>is</i> prefixed (?)	} te,	ta,	tud,
The Sanskrit,		ta,	tot, or tud.
The Gothic,	tha,	tho,	tha, or thata.

A modification of these pronouns, according to the rule adopted in the other persons, would produce the endings of verbs in the third person singular exactly as they are above laid down.

In those instances in which the third person of the verb has an ending in a vowel, we may account for the peculiarity by supposing, either that the suffix

has been omitted, as it was above shewn to be in some languages, or that a contracted pronoun, akin to the *e* of the Welsh or the *ε* of the Greek language, has been used.

The personal pronouns of the second and third persons are so nearly alike, that it was found necessary to distinguish the verb connected with each by some discriminating mark; and this was easily done by taking a form of one personal pronoun, which was perhaps originally only a dialectic difference, but in which the sibilant consonant is substituted for a dental one. It is well known that *ς* and *τ* are easily interchanged, as when the Greek *σσ* is transmuted into *ττ*, and in the present instance *τν* has been actually changed for *σν*. There being two forms of the pronoun, a sibilant and a dental one, the former was preferred for the characteristic of the second person in those instances in which the dental had been appropriated to the third person.

We shall endeavour in the sequel to make some of these remarks more certain and explicit, by an examination of particular tenses and a comparison of the different forms of verbs in the several languages of the same stock.

CHAPTER VI.

Of the Inflection of Verbs through Tenses and Moods.

SECTION I. General view of the subject.

THE observations comprised in the two last chapters relate merely to the personal endings of verbs, or to those inflections which serve to distinguish their different persons and numbers. The modifying principles, on which depends the discrimination of moods and tenses, yet remain to be analysed and compared. These are two distinct subjects of inquiry. I have been induced to enter into the former at some length for two reasons. The principal of these is, the convincing proof which the inflections already surveyed appear to furnish of a deeply-rooted affinity between the Celtic dialects and the other languages of Europe and Asia which have been compared with them. Another motive has been the hope of throwing some light on the grammatical principles governing the inflection of verbs in all these idioms. How far this attempt has been successful my readers must judge. I ought now to proceed to the more arduous task of examining the structure of verbs through their different moods and tenses, and of tracing the relations which the latter bear to each other in different languages. But this endeavour is in the outset obstructed by great, and, I fear, as yet hardly surmountable difficulties. The structure of the Teutonic languages, and the analogies of these to the Greek, Latin, and Sanskrit, have already occupied the attention of several accurate

and ingenious writers, who have been mentioned in the preceding pages ; but the Celtic dialects may be said to furnish a new and almost unexplored field. The attempts which have been made to elucidate their etymology have been, with very few exceptions, remarkably unsuccessful ; and it will perhaps be long before any person, possessed of the requisite opportunities for performing this task in the best manner, may be found ready to undertake it. In this deficiency of materials, and in the want of any correct arrangement of such as exist, I am aware that I enter upon the remainder of my inquiry under very unfavourable circumstances. I am quite unable to proceed in the investigation of the Celtic language and its affinities with that accuracy and lucid analysis, which Professors Bopp and Grimm have applied to the idioms which they have examined and compared. Perhaps, indeed, the subject itself does not admit of such illustration. I expect, however, to furnish proofs which shall be deemed a sufficient groundwork for the inferences to be founded upon them.

I shall enter upon this part of my subject, as in the former instance, by examining the particular features in other idioms, which I mean afterwards to compare with those of the Celtic dialects.



SECTION II.

Modifications of Verbs common to the Sanskrit and Greek.

The most striking and extensive marks of relationship are to be traced between the Sanskrit con-

jugations of verbs and the Latin and Greek, but particularly between the Sanskrit verbs and the Greek verbs in μ . The Sanskrit verbs may indeed be said to be governed by the same laws of conjugation as the latter. But, in making this remark, we must distinguish three series or different sets of Greek verbs in μ , and allow the two former to constitute in some respects an exception to this analogy, though in another point of view they will be found to confirm it. The first are those verbs which, besides the characteristic endings of this conjugation, have also a reduplication of the first syllable, or an addition which is a substitute for one, as the verbs $\tauίθ\eta\mu$, $\deltaίδω\mu$, and $\acute{\iota}\sigma\tau\eta\mu$. There are verbs in Sanskrit which have a similar reduplication: it is not, however, a general character, but the mark of a particular conjugation, which ranks as the third in the series of ten classes. Verbs of the third conjugation reduplicate the first consonant, or make some equivalent prefix. Thus from the verbal root $d\bar{a}$, *to give*, comes the verb $d\bar{a}d\bar{a}mi$, $d\bar{a}d\bar{a}si$, $d\bar{a}d\bar{a}ti$, answering to $\deltaίδω\mu$, $\deltaίδω\varsigma$, $\deltaίδω\sigma\iota$ or $\deltaίδω\tau\iota$, which prefixes this reduplication through the four first tenses formed like the three first in Greek from the present tense, but has no remarkable peculiarity in the other parts of the verb. Many other Sanskrit verbs, which do not belong to the third conjugation, undergo a modification not unlike that of the root of $\acute{\iota}\sigma\tau\eta\mu$. Thus from the root $\acute{\epsilon}\tau$ — $sht'ha$, *to stand*, comes the present tense $tisht'hami$, $tisht'hasi$, $tisht'hati$. A second class of Greek verbs in μ insert the syllable ν between the verbal root and the personal endings, as the verb $\zetaένυ-\nu-\mu$. There is likewise a particular class of Sanskrit verbs

analogous to these, and having the same distinction, which is considered as the character of the fifth conjugation : but these are, as in Greek, a comparatively small number of verbs. Those Greek verbs in μ , however, which bear the nearest resemblance to the generality of Sanskrit verbs, are such as make no prefix to the initial of the root, nor any insertion, but merely add the personal termination. Among these we reckon $\phi\eta\mu\iota$, dico ; $\iota\sigma\eta\mu\iota$, scio ; $\epsilon\iota\mu\iota$, sum ; and $\epsilon\tilde{\iota}\mu\iota$, vado. Some of the same class are obsolete in the present tense, and only used in the aorist, as $\beta\eta\mu\iota$, proficiscor, and $\gamma\eta\rho\eta\mu\iota$ senesco ; and this last may be compared to the Sanskrit verb jarami, of the same meaning.

	Sanskrit.	Greek.	Doric forms.
Si.	jarami	$\gamma\eta\rho\eta\mu\iota$	
	jarasi	$\gamma\eta\rho\eta\varsigma$	
	jarati	$\gamma\eta\rho\eta\sigma\iota$	$\gamma\eta\rho\alpha\tau\iota$.
Du.	jaravas		
	jarat'has	$\gamma\eta\rho\alpha\tau\omicron\nu$	
	jaratas	$\gamma\eta\rho\alpha\tau\omicron\nu$	
Pl.	jaramas	$\gamma\eta\rho\alpha\mu\epsilon\nu$	$\gamma\eta\rho\alpha\mu\epsilon\varsigma$ (?)
	jarat'ha	$\gamma\eta\rho\alpha\tau\epsilon$	
	jaranti	$\gamma\eta\rho\alpha\sigma\iota$	$\gamma\eta\rho\alpha\nu\tau\iota$.

Of the Præterita Augmentata, or Preterimperfect Tense and Aorists.

There are two preterite tenses in Sanskrit verbs, which are deserving of particular notice, as they are formed in a manner very similar to that of two tenses of the Greek verb. One of them is analogous to the imperfect, and the other to the aorists ; and

there is no reason that forbids their being distinguished by these terms.

1. The imperfect is formed from the present tense by prefixing an augment, and abbreviating the personal endings. The augment is the first short vowel अ — ă , which corresponding with the short vowels of the Greeks might be represented indifferently by ă or è . Thus are formed from

tudāmi	}	—	{	ătudam
tudasi				ătudas
tudati				ătudat.

2. The aorist has three, or rather, according to professor Bopp's division, seven forms. Of these it is observed, that the four first agree more or less closely with the Greek first aorist, the fifth and sixth with the second aorist, and the seventh, which, besides an augment, admits a reduplication of the first syllable, with the preterpluperfect. Thus in the four first some make this tense by inserting *s*, or the syllable *is*, or *sa*, or *sas*, between the root and the personal endings, and by prefixing the augment to the root, the vowel of which undergoes a change by the forms *guna* and *vridhdhis*. The root *kship*, present tense *kshipami*, makes the aorist *akshoipsam*. This is one of the examples given by Bopp, and the analogy is more striking, if the words are written as the Greeks would have written them, thus ;

Root.	Present tense.	Aorist.
$\xi\acute{\iota}\pi$,	$\xi\acute{\iota}\pi\alpha\mu\iota$,	$\epsilon\acute{\xi}\iota\sigma\iota\psi\alpha\mu\iota$,

The two succeeding forms of the aorist differ from the imperfect tense very nearly in the same manner in which the second aorist in Greek differs from the Greek imperfect.

We shall find the insertion of *s*, *sa*, or *as*, to be a method used in other instances for the formation of tenses with a past signification.

SECTION III.

Forms common to Greek, Latin, and Sanskrit.

The preceding modifications of the verb are peculiar to the Sanskrit and the Greek languages. The Latin has an imperfect resembling the Greek in meaning, though formed by a totally different mode of inflection, but it has nothing analogous to the aorist. All these three languages agree in the circumstance, that they frequently modify the present tense by an insertion of particular consonants between the verbal root and the personal endings, which consonants are dropped in the further conjugation of the verb. Such are the *ισκ*, or *isc*, in such verbs as *ἀναλίσκω* and *frigesco*, the *αν*, in *αἰσθάνομαι*, *ἁμαρτάνω*, and the numerous verbs resembling them, which are analogous to the verbs of the ninth conjugation in Sanskrit: the latter insert *na* between the root and the termination in the present tense^a. These insertions are retained only in those tenses derived immediately from the present, as the imperfect is in Latin and Greek: they are dropped in the preterperfect and other forms of the verb.

The Teutonic language wants all these and many other variations: it has no tense formed by a modification of the present. "The capability of flection in the German verbs seems," says professor Grimm, "to have been greatly impaired. Of the passive

^a As *krinami*, *krinasi*, &c. from the root *kri*, pret. *chi-kri-ya*.

“ voice the last remains disappear with the Mæso-Gothic : the middle voice is every where wanting, with the exception of a reflected form in the old northern dialect, which is in some degree analogous to a middle voice. Four moods exist ; the infinitive, imperative, indicative, conjunctive, but there is no optative. What is most to be regretted is the loss of many tenses : only a present tense and a preterite remain to us : the future, and all the different degrees of the past signification, can no longer be expressed by a change in the form of the verb itself^b. ”

SECTION IV.

Formation of the preterperfect in Greek, Latin, Sanskrit, and Teutonic verbs.

The preterperfect seems originally to have been formed on the same principle in the Greek, Latin, Sanskrit and Teutonic languages. Many changes in the forms of verbs have been produced by the addition of auxiliaries, or of particles inserted in or added to the root, but the preterperfect, in that method of conjugation which appears to have been the primitive one, is an inflection properly so termed. A partial repetition of the verbal root itself seems to have been originally adopted to denote a past signification, implying the act to have been done and completed.

PARAGRAPH 1.

Preterite in Teutonic Verbs.

The preterite of the strongly inflected conjugation, says Dr. Grimm, “ must be considered as a chief beauty of our language, as a character intimately

^b Grimm's Deutsche Grammatik. Theil. 1.

“ connected with its antiquity and its whole constitution. Independently of the inflection in the endings, of which the nature has already been pointed out, it affects the roots themselves, and that in a double manner; either the beginning of the root is repeated before itself, or the vowel of the root, whether initial or medial, is modified. The Gothic language yet retains both methods, it reduplicates and modifies: sometimes it applies both methods at once. Reduplication never affects the terminating consonants of the root. In the other Teutonic dialects reduplication disappears, if we except slight traces, and instead of it an unorganized diphthong has been formed, the doubling of the consonant being no more thought of.

“ The reduplicating conjugation leaves the vowel sound of the root unaltered, and only puts the doubled syllable before the singular and plural of the preterite both indicative and conjunctive, but not before the participle. The modifying conjugation never leaves the vowel of the present tense unaltered in the preterite. On this principle are formed six reduplicating conjugations, and six of the latter description.” I must refer the reader for further particulars to Dr. Grimm’s work, and shall here give merely an example of each of these twelve conjugations, all belonging to the strong or primitive Gothic inflection. Under each verb are inserted the present indicative, the preterite first person singular and first person plural, and the participle.

1. Conjugation. Salta—salio, I leap.

Salta; pret. sáisalt, sáisaltum; saltans.

2. Máita; abscido, I cut.
Máita; pret. máimáit, máimáitum; maitans.
3. Hláupa; curro, I run.
Hláupa; pret. hláihlaup, hláihlaupum; hlaupans.
4. Slêpa, dormio, I sleep.
Slêpa; pret. sáislêp, sáislêpum; slêpans.
5. Laia, irrideo, I laugh.
Láia; pret. láilô, lailôum; láians.
6. Grêta, ploro, I weep or grete, Scottish.
Grêta; pret. gáigrôt, gáigrôtum; grêtans.
Sixth Conjugation without reduplication.
7. Svara, juro, I swear.
Svara; pret. svôr, svôrum; svarans.
8. Skeina, luceo, I shine.
Skeina; pret. skain, skinum; skinans.
9. Liuga, mentior, I lie.
Liuga; pret. láug, lugum; lugans.
10. Giba, do, I give.
Giba; pret. gab, gêbum; gibans.
11. Stila, furor, I steal.
Stila; pret. stal, stêlum; stalans.
12. Hilpa, adjuvo, I help.
Hilpa; pret. halp, hulpum; hulpans.

I have taken these examples in full, because the analogies which they display to the forms of our tongue are interesting to English readers. The Mæso-Gothic is far more perfect in its inflections than any other language of the same stock. In the later dialects they gradually fade away, but still the remains are reducible to the same system.

The weaker form of verbal inflections is, according to Grimm, modern in comparison of the stronger form. For the grounds of this opinion I must refer

the reader to his work^a. The preterite is formed by the insertion of a syllable of which *d* is the consonant, and this is regarded by Grimm as an abbreviated auxiliary, derived from the verb to *do*, which in the Old High German is *tuon*. Thus *sókida*, I sought, is I “seek—did.” The inflections of this verb *tuon* are very distinct in the Old High German, and appear to give some probability to Dr. Grimm’s conjecture as to the origin of the preterperfect tense, in the form which has become most frequently used in the modern German and English languages^b.

PARAGRAPH 2.

Preterperfect tense in Greek and Sanskrit.

The formation of the preterperfect tense in Greek and in Sanskrit is on principles so similar, that it requires more care to sum up the points in which they differ than those in which they agree. In both, the root, which frequently consists of one syllable, is preserved nearly in its entire state, with a final short vowel added to it, and a short syllable generally prefixed, which is termed the reduplication. In Greek the vowel of the reduplication is always *ε*, but in Sanskrit the vowel is the short one corresponding with that of the verbal root: thus from the root तुप्—*tvv*, which forms a verb of nearly the same meaning in Greek and in Sanskrit, the preterite is in one language τέτυπα, and in the other tŭ-tôpa. The reduplicated consonant in Greek is a tenuis, and in Sanskrit the tenuis or media, when the root begins with an aspirate, and when double consonants are the initials, the first is alone redupli-

^a Deutsche Grammatik. th. i. p. 1040.

^b See p. 885, 1039, 1042, of Grimm’s Deutsche Grammatik.

cated. In this last case the two languages just mentioned have consulted euphony more than either the Latin or Teutonic, both of which repeat the double consonants. The principal vowel of the root undergoes a change in the preterperfect, which in Sanskrit is termed *guna* and *vridhdhis*. This is analogous to the corresponding change in the Greek old preterperfect, in such forms as μέμνηται and οἶδα, and to the changes above alluded to in the Teutonic and Latin preterites.

The following words will serve to exemplify this form of Sanskrit verbs :

Root.	Third person Present.	Preterite.
bhrī	bharāti	bābhāra.
tri	tarāti	tātāra.
tup	tupāti	tūtōpa.

PARAGRAPH 3.

Of the preterperfect in Latin verbs.

Many Latin verbs form the preterperfect by reduplication, and there is reason to believe that the number was originally much more considerable. We may regard it as probable, that this was the oldest form of the preterperfect tense in the Latin language, as well as in the cognate idioms.

In some respects the Latin reduplicated preterite agrees with the Teutonic, in others with the Sanskrit, and with both more nearly than with the Greek.

1. Aspirate and double consonants are reduplicated in Latin as in Mæso-Gothic verbs; this is avoided in Greek and Sanskrit. In the Mæso-Gothic we have from the verb *skaidan*, *scheiden*, to separate, the following :

Skáida ; skáiskáid, skáiskáidum ; skaidans.

In Latin we have in like manner :

sciscidi from scindo.

spondeo spospon̄di not sospon̄di.

fallo fefelli not π efelli.

2. The vowel of the reduplicated syllable is in Greek always ϵ , in Mæso-Gothic $\acute{a}i$. In Latin as well as in Sanskrit verbs the vowel of the verbal root is reduplicated ; as in Sanskrit, the verbal root

mad, makes mamāda,

lish lilaisha,

tup tutōpa,

so in Latin,

pedo pepedi,

mordeo momordi,

tundo tutudi,

curro cucurri^c,

In Latin however the reduplicated syllable follows the quantity of the verbal root ; in Sanskrit it is always short, whatever may be the quantity of the root.

The following are some of the examples of reduplication yet remaining in Latin verbs.

memini, i. e. memeni.

spospon̄di.

momordi.

pepedi.

peperi.

poposci.

pupugi.

sciscidi.

tetigi.

pepigi, i. e. pepegi^d.

totondi.

pepuli.

cucurri.

cecīdi.

cecini, i. e. ceceni.

cecīdi.

didici.

tutudi.

fefelli.

^c The apparent exceptions from this rule seem to admit of explanation. See Grimm, th. i. p. 1055.

^d Pango and $\pi\acute{\eta}\gamma\gamma\upsilon\mu\iota$ being variations of $\pi\acute{\eta}\gamma\omega$.

Dr. Grimm has remarked that verbs which change a short vowel in the root or present tense into a long ē in the preterperfect had originally a reduplication. Pango, or rather pago, makes pepigi, but compingo makes compēgi. This proves the analogy of the two forms ; and on the model of pago, pepegi, contracted to pēgi, we have

	capio,	cēpi.
	ago,	ēgi.
frango, i. e. frago,		frēgi.
	facio,	fēci.
	jacio,	jēci.
	lego,	lēgi.
	emo,	ēmi.
	venio,	vēni.
	edo,	ēdi.
	sedeo,	sēdi.
	fugio,	fūgi.

It is observed, in confirmation of this remark, that these verbs have in many instances a reduplication, or, what is allied to it, an internal inflection, in the cognate languages ; as *cēpi* resembles *hōf* in Gothic ; *fugi*, *πέφυγα* ; *lēgi*, *λέλογα* ; and *venio*, *vēni*, the Mæso-Gothic verb which is analogous to come and came.

The custom of reduplication in forming the preterite fell into disuse ; supplementary methods were found to answer the same purpose, the principal of which were the following.

1. The insertion of the letter *s* before the final *i*, as in

repo,	repsi.
lego,	lexi.

2. The insertion of the syllable *āv*, *iv*, mutable into *u*, as

am-av-i.

aud-iv-i.

doc-u-i.

The former of these methods is analogous to an inflection, of which we trace an extensive use, in the cognate languages; the latter is quite peculiar to the Latin. The *av* has been thought to be allied to the *bo* and *bam* of the future and imperfect preterite.



SECTION V.

Of the remaining forms of the Verb—Potential, Optative, and Conjunctive moods—Future tenses—Middle and Passive voices.

Most of the remaining forms of the verb appear to be simple inflections properly so termed, and not, as some have suspected, compound words. From this remark we must make an exception, as far as regards the pronominal suffixes, on which so much has already been said; for these are, as the reader is well aware, abbreviated words brought into composition with the verbs. With this exception, the moods and tenses of verbs which are now to be considered may be looked upon as formed in all probability by simple inflection. There are indeed some of these forms which have been thought by late writers to have derived their peculiar shades of meaning, in relation to time and mode, from the insertion or addition of significant particles, or other words of a similar use^a.

^a I allude to Professor Bopp's opinion and to some other similar conjectures. According to Bopp's, the future tenses are compounds of a verbal root, or of an attributive vocable and

But the instances in which this can be supposed with any degree of probability are, in comparison with others, very few, and the inference with respect to them is but doubtful at best. And in by far the greater number of examples composition of words seems to be out of the question; and it is evident that a mere inflection has been employed, the original or simple verb having been by design somewhat modified in pronunciation, or by the addition or insertion of a consonant or vowel, so as to impart to it a sense in some mode or circumstance different from the primitive one.

Thus it has often been remarked, that it is a character common to the conjunctive, potential, and optative forms of the verb to change proper vowels, and especially short vowels, into diphthongs. On this fact a somewhat whimsical theory has been founded by the learned and fanciful Professor Murray. He says, "The subjunctive of all Greek, Latin, " and Teutonic verbs arose from laying an emphasis " expressive of the conditional state of the mind on " the last syllable of the verb immediately before " the personal pronoun. This emphasis not only " drew the accent to the syllable, but also extended " it by the insertion of *e* or *o* short, the consequence

certain forms of the verb substantive. This conjecture has been supported with great ingenuity, and has even in its favour a great number of coincidences. But I think it is by no means established. Those, however, who are not acquainted with Professor Bopp's able attempts to analyse the conjugations of verbs will find their trouble amply repaid in reading his "Conjugation-
" system der Sanskritsprache," and likewise his observations subsequently published in the *Annals of Oriental Litt.* and still more fully in his *Grammatica Critica Linguae Sanskritae*.

“ of protracted pronunciation.” “ The voice was kept up, and this inserted vowel gradually slid into union with that which supported the pronoun, and formed with it a long sound, expressive of suspense and incomplete indication.” “ The optative of all tenses had a similar origin. In wishing, we dwell on the word, and give it an unusual emphasis, the sign of strong, lingering, ardent desire.” “ In grief the emphasis is long, and uttered with a wailing, melancholy tone. The connection between *grief* and *desire* is close and obvious :

εἶθ' ὧς ἠβώοιμι, βίη τέ μοι ἔμπεδος εἴη,
ὥς ὁπότε κρείοντ' Ἀμαρύνκεα θάπτον Ἑπειῶι—

“ The effects of this state of mind on the medium of thought, are that the vowels are protracted, while the consonants rather sink and vanish.”

Whatever may be thought of this explanation, the fact to which it relates is undoubtedly observed in the conjugations of Latin, Greek, Sanskrit, and Teutonic verbs. In all these, the substitution of diphthongs, and longer or more numerous vowel sounds, is characteristic of the optative, potential, and conjunctive moods.

PARAGRAPH 2.

Of the Future Tenses.

The formation of future tenses deserves a particular notice.

Proper future tenses formed by inflection are entirely wanting in the Teutonic languages. In Latin, Greek, and Sanskrit they are yet extant; and in all these, analogies are to be traced in their formation.

The Sanskrit has two distinct future tenses, which are formed as follows.

The first future, or perfect future, is formed by adding *tā* to the verbal root, or rather by inserting it between the root and the pronominal suffix. This syllable is often preceded by an additionally inserted *i*, and in some of the persons it is *tas* rather than *tā*. Thus from the root यच्—*yach*, or rather the verb *yachami*, αἵτεω, we have *yachitasmi*, αἵτήσω, or, as I here divide the words,

Present, *yach-a-mi*.

Future, *yach-i-tas-mi*.

The second future instead of the syllable *ta* or *tas*, inserts *sya*, as *yachisyami*, or

yach-i-shya-mi.

The स—*s* is converted into श—*sh*^b by the Sanskrit rules of euphony.

Future Tenses in Greek.

The first future in Greek is formed in a manner very similar to that of the second future in Sanskrit.

The termination of the first future seems originally, as it is observed by Matthiæ, to have been the same throughout, εσω from ω. Thus we find ὀλέσω from ὀλω, ἀρέσω from ἄρω. The middle voice ὀλεσομαι would indicate an active ὀλέσομι, which perhaps once existed, and which would be the regular form if the suffix *μι* had been preserved through the different tenses in Greek as it has been in Sanskrit.

^b The Sanskrit sibilant श is neither *s* nor *sh*. It is said to be pronounced by passing the voice, with the tip of the tongue applied to the fore part of the palate, and is represented in Wilkins's Grammar by *ṣ*. *Sh* is perhaps the mode of expressing it most nearly in our orthography.

The first future consists therefore in Greek in the insertion of $\epsilon\varsigma$ before the pronominal suffixes, in analogy with the Sanskrit *sya* or *ishya*.

It may be observed, that the terminations of this form of the verb, both in Greek and in Sanskrit, are identical with the future tense of the verb substantive, in Greek $\epsilon\sigma\omicron\mu\alpha\iota$ and in Sanskrit *syami*. This is the principal foundation for the hypothesis of Professor Bopp, who considers many modifications of attributive verbs to be derived from a composition of a verbal root with the tenses of the verb substantive. If other tenses corresponded with the terminations of the verb substantive so closely as the future, there would be sufficient evidence to support this opinion. At present, we can only regard it as an ingenious conjecture. The Celtic language, however, presents a feature which gives it a degree of additional probability: to this we shall have occasion hereafter to advert.

2. The second future in Greek is a slight inflection of the present, as $\lambda\epsilon\gamma\tilde{\omega}$, $\pi\iota\theta\tilde{\omega}$, from $\lambda\acute{\epsilon}\gamma\omega$, $\pi\acute{\epsilon}\theta\omega$. The present tense is often used for the future by the poets; and this form seems to have been originally a mere change in the accent or emphasis of the present, designed thus to mark a variety in the sense. Some grammarians^c have indeed maintained that the supposed second future is merely a first future in a different form, in which case there would be no second future in Greek. This would be contrary to the analogy of the cognate languages. However, it must be allowed that there is not in Greek, as there is in Latin and in Sanskrit, a second

^c See Dawes, *Miscellanea Critica*, p. 372.

future distinguished from the first by a difference of sense.

Latin Futures.

The future tenses in the Latin language are formed in a great variety of ways.

1. The most simple form is a slight modification of the present, *regam*, *reges*, *reget* being substituted for *rego*, (which, according to the analogy already pointed out, was perhaps originally *regim*,) *regis*, *regit*. This recalls those languages in which the present tense is used for a future, and the British future *credav* is nearly like it. It is still more closely allied to the conjunctive present *regam*, *regas*, *regat*. A slight difference in pronunciation was adopted, to mark these varieties in the meaning or in the relations of the verb to time and mode. This is an instance of simple inflection. Here is no place for the hypothesis of compound verbs, or of particles introduced and interpolated.

2. Another mode of giving to verbs a future signification adopted by the Latin grammarians was that of inserting a syllable, a method analogous to that practised in Greek and in Sanskrit conjugations; but instead of the $\epsilon\sigma$ or σ of the Greek futures, and the *sya* or *ishya* of the Sanskrit, the Latins inserted *er* between the verb and the pronominal suffix, the verb retaining the characteristic of the preterperfect tense; as

rex-er-o, *rex-er-imus*.
audiv-er-o, *audiv-er-imus*.

The substitution of *r* instead of *s* appears in this instance, as in a great many inflections in the Latin language, to be an innovation, originating either from some preference on account of euphony, or from

accidental variation of utterance. The old Latin form was in all probability similar to the Greek, *es* being the syllable interpolated. *Rexeso* and *rexesimus* gave a harsh and difficult sound, and were softened to *rexero* and *rexerimus*^d.

3. A third species of future tense in Latin verbs arises from the insertion of *b* or rather of *ab*, *eb*, or *ib*. Even this has been referred to the composition of an attributive root with the verb substantive. Recourse has been had here to the verb *fuo*, analogous to *bhu* or *be*, as in the former instance to the verb अस्—*as*, *esse*, or *ईवा*. The terminations of the Latin future *amabo*, *bis*, *bit*, are supposed by Professor Bopp to have been derived from a Latin future of the verb substantive analogous to the Anglo-Saxon *beo*, *bys*, *byth*.

It is remarkable, with respect to both the Latin futures, that a slight change merely of the termination gives rise to a form of the verb, which has a preterite signification, as *amavero* (perhaps originally written *amaverim*, but subsequently distinguished from that conjunctive form) makes *amaveram*, and *amabo* (*amabim*?) makes *amabam*. This circumstance tends to render it most probable that there is nothing in the inserted *ba* or *bo*, which by itself gives either a past or future sense, and that it is merely through conventional use that any precise distinction of time is obtained from this modification of the verb. In Sanskrit and in Greek, as well as in Latin, the future tense is converted into a preterite by a change of the termination; this is connected in

^d On the substitution of *r* for *s*, I must refer the reader to sect. 6. of chapter ii. in which this subject is considered.

the two last mentioned languages with the addition of the augment.

The facility indeed with which these preterite forms of the verb, either with a slight modification, or without any change, are adopted with a future meaning, seems remarkable, when we first contemplate it; but the frequent occurrence of a parallel fact in different languages is calculated to lessen our surprise. What can be more strange and apparently anomalous than the changes connected in Hebrew with the use of the *Vau Conversivum*? In Hebrew the future imperative, optative, and potential forms are all identified, or nearly so, with each other, or one modification of the verb answers to all.

In like manner we find corresponding forms of the verb, which may be considered as the same identical inflections of the verbal root, (if we make allowance for the varieties of orthography and termination proper to the cognate languages, or for the stated interchange of letters between them,) denoting in one language a future, and in another a potential, or even a preterite tense, with something of the potential or conjunctive signification attached to it. Thus the Sanskrit future, the Greek aorist optative, and the Latin preterpluperfect have nearly the same endings. From the Sanskrit root *yach* we have in the future,

yach -ishyami.

From *αἶτεω*, aor. 1. opt. *αἶτ* -ήσαιμι.

From *quæro* in Latin, *quæs*-issem.

In the plural, *yach* -ishyamus.

αἶτ -ήσαιμεν, or *μες*.

quæs-issemus.

Here *ishyami*, *ἔσαιμι*, and *issem*, in which the *e*

makes ēmus and ētis long, and was nearly equivalent to a diphthong, afford striking analogies, and are in fact the same form with slight varieties of orthography, but somewhat greater variety in signification.

PARAGRAPH 3.

Middle and Passive Voices.

The Sanskrit has in its verbs three voices nearly corresponding with the Greek.

The voices in Sanskrit corresponding with the Greek middle and passive form themselves by a similar change of termination with that of the verbs in μ : as $\delta\acute{\iota}\delta\omega\sigma\iota$, or rather $\delta\acute{\iota}\delta\omega\tau\iota$, is changed into $\delta\acute{\iota}\delta\epsilon\tau\alpha\iota$, so bhavati is converted into bhavatai. I cannot but believe that the original form of the verb in Sanskrit was

$$\left. \begin{array}{l} \text{bhavamai,} \\ \text{bhavasai,} \\ \text{bhavatai,} \end{array} \right\} \text{from} \left\{ \begin{array}{l} \text{bhavami.} \\ \text{bhavasi.} \\ \text{bhavati.} \end{array} \right.$$

but the first person is, according to the established inflections of the Sanskrit language, bhavai, instead of bhavamai.

I shall not pursue further at present the inflections of verbs in the different voices. The reader will find enough to answer my chief design in a succeeding chapter, in which examples of the regular verbs are inserted.

The termination most characteristic of passive tenses in Latin, viz. *r*, must here be mentioned, as it serves as a point of comparison between the Celtic and the Latin verbs.

Another point in which we shall find a relation

between the Latin and the Celtic verbs, as likewise between the Greek and Celtic, is the defective state of the inflection of persons in the passive tenses. But we shall again take notice of this circumstance in its proper place.

CHAPTER VII.

Illustration of the principles developed in the preceding chapter. Conjugation of the verb substantive and of attributive verbs, both in the other Indo-European languages and in the Celtic dialects.

SECTION I. General Remarks. Analysis of the Verb Substantive in several languages.

THE preceding remarks will perhaps be deemed sufficient to explain the general principles of verbal inflection in the languages to which they refer ; but before I can proceed to my ultimate object, which is to compare the Celtic verbs with those of the idioms supposed to be cognate with the Celtic language, it is requisite to illustrate the principles now developed by some particular examples. I shall with this view lay before my readers a brief analysis of the verb substantive in Sanskrit, pointing out in the first place the agreements of the Sanskrit with the other languages generally allowed to be allied to it. I shall afterwards endeavour to illustrate in a similar manner the Celtic inflections, and to shew that they manifestly partake in the same general analogies.

I have already observed, in the list of verbal roots contained in a preceding section, that there are in Sanskrit two verbs substantive, of which cognates are found in various idioms. They are the verb अस्मि—*asmi*, from the root *AS*, corresponding with *esse* or *sum* in Latin and *εἶμι* in Greek, and भवामि—*bhavami* from the root *BHU*, allied to the old Latin verb *fuo*, and in the sense of *oriri*, *nasci*, which also belongs to this Sanskrit root, to the verb *φύω* or *φύναι* in Greek. There is, I believe, no language in which both of these verbs are extant in a com-

^a Rosen, *Radices Sanskritæ*, p. 52, 53.

plete state, but they are least defective in Sanskrit, which has lost many tenses of the verb *asmi*, though it has preserved the whole of *bhavami*. The Persian has two corresponding verbs, *buden*, and *am* resembling *asmi*: they are both defective, and each contributes some tenses towards the conjugation of the verb substantive, which is thus made up of their fragments. The Slavonian verb substantive is formed from similar elements; the present tense and those dependent on it are nearly allied to *asmi*, and the past tenses are derived from *büt'* or *bud'* the cognate of *buden* or *BHU*. The Teutonic languages display the same formation: *IST* or *IS* belongs to the former; *beon*, *be*, *been*, to the latter element. In Latin *fu* and *esse* are combined in a similar manner. The Celtic language, as I shall shew in the following section, has one of these verbs in a more perfect state than any other language except the Sanskrit. The verb *bu* or *býdh*, corresponding with *bhu* or *buden*, is nearly complete, if not entirely so; but there are only fragments, as in other languages, which resemble the cognates of *asmi*.

PARAGRAPH 1.

Verb ASMI and its cognates.

I shall now compare the principal parts of the verb *asmi*, and subjoin some corresponding forms in the cognate languages.

Present tense.

1. In Sanskrit.

	First person.	Second person.	Third person.
Sing.	<i>asmi</i>	<i>asi</i>	<i>asti</i>
Plur.	<i>smah</i> or <i>smus</i>	<i>st'ha</i>	<i>santi</i>
N. These plural forms were originally (?)			
	<i>asmus</i>	<i>ast'ha</i>	<i>asanti.</i>

2. In Greek according to the old forms.

Sing.	ἐμμι	ἐσσι	ἐσσι
Plur.	εἰμὲς	ἐστὲ	ἐντι

3. In Latin.

Sing.	esum	es	est
Plur.	sumus	estis	sunt

4. In Persian.

Sing.	am	iy	est
Plur.	īm	īd	end

5. In Slavonian^b.

Sing.	yesm'	yesi	yest'
Plur.	yesmi	yeste	sut' for jesut'

6. In Lettish or Lithuanian^c.

Sing.	esmi	essi	esti
Plur.	esme	este	esti

7. In Mæso-Gothic.

Sing.	īm	īs	ist
Plur.	siyum	siyuth	sind

which according to Dr. Grimm was originally in the plural,

	isum	isuth	isind
or,	isam	isith	isand.

It is at once evident, that all these are slight modifications of the same element conjugated by means of the same suffixes. The variation between the different languages is not exceeding such as exists between proximate dialects of the same speech.

The preterimperfect tense is not to be traced with so much regularity. It is in Sanskrit,

Sing.	asam	asis	asit
Plur.	asma	asta	asan.

^b Grimm, I. p. 1064. Vater. p. 98.

^c Grimm, *ibid*.

In Latin, *esam* was probably the old form of *eram*, for *s*, as we have seen, was often changed into *r*, and *esam* would regularly form *esem* in the subjunctive, which is actually found,

Sing.	<i>esam</i>	<i>esas</i>	<i>esat</i>
Plur.	<i>esamus</i>	<i>esatis</i>	<i>esant</i> .

The second form of the verb in the arrangement adopted by Sanskrit grammarians is the potential. The potential form of the verb *asmi* bears a strong analogy to the old Latin potential *siem*, and, as M. Bopp has also shewn, to the Mæso-Gothic potential.

Singular.

Sanskrit,	<i>syām</i>	<i>syās</i>	<i>syāt</i>
Latin,	<i>siem</i>	<i>sies</i>	<i>siet</i>
Gothic,	^d <i>siyau</i>	<i>siyais</i>	<i>siyai</i> .

Plural.

Sanskrit,	<i>syāma</i>	<i>syāta</i>	<i>syus</i>
Latin,	<i>siemus</i>	<i>sietis</i>	<i>sient</i>
Gothic,	<i>siyaima</i>	<i>siyaith</i>	<i>siyaina</i> .

It may be observed that all these words have lost the initial vowel *ā* or *ε*, and that if it were restored the preceding forms would bear a near analogy to *ἔσμαι*, which, though not extant, would be a regular derivative from the etymon of *ἔσομαι*.

The Sanskrit verb *asmi* has no future, but M. Bopp conjectures with great probability, that *syami*, the adjunct by which a future tense is formed in attributive verbs, is in fact only the obsolete future

^d This form is considered by Hickes (Thesaur. Ling. Sept. tom. I.) as a future tense, but Dr. Grimm has shewn that the Teutonic dialects have no simple future, properly so termed. The potential is, however, used for a future by Ulphilas. See Bopp, in *Annals of Oriental Litt.* p. 49.

of the verb *asmi*. A fact strongly favouring this hypothesis is, that a tense of this verb exists in Sanskrit, and is recognised as such, which is only used in forming the preterperfect tense of certain verbs. *Āsa*, *āsīt'ha*, *āsa*, is termed the third preterite or aorist of *asmi*^c. It is joined with *kārayām* from the verb *karomi*, *facio*, *creo*, and forms *kārayāmāsa*, *fecit*, *creavit*.

There is only one other tense of the verb *asmi*, which is the imperative.

Sing.	<i>asāni</i>	<i>aidhi</i>	<i>astu</i>
Plur.	<i>asāma</i>	<i>stā</i>	<i>santu</i> .

Compare *astu*, with *ἔστω*, *esto*; *sta* with *ἑστῆ*, *este*, and *santu*, with *sunto*. The second person, *aidhi*, bears, as we shall see, a strong analogy to some of the modifications of the verb substantive in the Celtic.

PARAGRAPH 2.

Verb *bhavami* and its cognates.

I shall now give the principal parts of the Sanskrit verb *bhavami*, which is entire, though its cognates in most other idioms are only extant in fragments.

1. Present tense.

Sing.	<i>bhavāmi</i>	<i>bhavāsi</i>	<i>bhavāti</i>
Plur.	<i>bhavāmus</i>	<i>bhavāth'a</i>	<i>bhavānti</i> .

This tense exemplifies the personal endings in their complete state.

2. Potential.

Sing.	<i>bhavaiyam</i>	<i>bhavais</i>	<i>bhavait</i>
Plur.	<i>bhavaima</i>	<i>bhavaita</i>	<i>bhavaiyús</i> .

This form corresponds with the Greek in *αἶμι*, *aís*, *ai*, *αἶμεν*, *aíte*, *aíεν*.

^c Wilkins's Sanskrit Grammar, p. 187.

3. Imperative.

Sing.	bhavāni	bhava	bhavatú
Plur.	bhavama	bhavata	bhavantu.

4. First Preterite or Imperfect.

Sing.	abhavam	abhavas	abhavat
Plur.	abhavām	abhavata	abhavan.

This tense has the abbreviated form of personal endings.

N. The preceding forms, considered as derived from the present tense, display that modification in the root (as bhava for bhu) which marks the different conjugations. The remainder, which may be compared with the tenses of ἵστημι formed from στάω, have the root in its original state, and with respect to these tenses, there is only one conjugation in Sanskrit verbs^f.

5. Second Preterite or Aorist.

Sing.	abhūvam	abhus	abhut.
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Personal endings in the abbreviated form.

This corresponds with ἔφυν, ἔφυσ, ἔφυσ.

^f The ten conjugations or forms of Sanskrit verbs differ from each other only in those tenses which are formed from the present. The first modifies the root and interposes *a* between it and the suffixes, as BHAV-Ā-MI from BHU. The second subjoins the suffixes immediately, as ASMI from AS. The third reduplicates in the present, as DADĀMI (δίδομι) from DĀ. The fourth inserts *ya* between the root and suffixes, as DAMYAMI (domo) from DAM (tame, domitus). The fifth inserts *nu* after the root, and corresponds exactly with the conjugation of ζεύγ-νυ-μι. The sixth modifies the termination of the root somewhat differently from the first, as MRIYATAI (moritur) from the root MRI. The seventh inserts *n* in the root, as in Latin we find JUNGO from the root JUG-UM. The eighth resembles the fifth, but adds only *u* to roots ending in *n*. The ninth adds *na* to the root, and is analogous to the form of φθάνω, ἐλεείνω. The tenth inserts *i* in the root, and inflects like the first. These analogies have been pointed out fully by Dr. Murray (Hist. of European Languages).

6. Reduplicate Preterite.

Sing.	babhuva	babhuvit'ha	babhuva
Plur.	babhuvima	babhuva	babhuvús.

This corresponds very closely with the Greek *πέφνα*,
πέφνας, πέφνε, πεφύαμεν, πεφύατε, πεφύασι.

Babhuvima in its termination is allied to fuvimus from fuo^b.

7. First Future.

Sing. bhavatasmi.

The personal endings nearly as in the present tense.

8. Precative.

Sing. bhuyāsam.

The personal endings abbreviated.

9. Second Future.

Sing. bhavishyami.

The personal endings in full. In Latin fuissem nearly approaches to the above form, or perhaps more closely to the following :

10. Conditional.

Sing. Abhavishyam.

Personal endings abbreviated.

Infinitive Mood.

Bhavitum.

The infinitive mood in Sanskrit bears an analogy to the Latin supine.

Participles.

Adverbial Participle, bhūtvā.

Passive, bhūta.

Pret. Reduplicate, babhuvas.

^b As by Ennius, " Nos sumu' Romani, qui fuvimus ante Rudini."

Present, bhavat.
 Future, bhavishyat.

The participles are given without their terminations, which are added in declining them, and resemble those of adjectives.

The preceding forms are given by grammarians as those of the active voice; but this verb is inflected through two other voices, analogous to the middle and passive. Of these I shall only extract the present, the reduplicate preterite, and the participles.

Middle Voice or Atmanaipadum.

Sing.	bhavai	bhavasai	bhavatai
Dual.	bhavavahai	bhavait'hai	bhavaitai
Plur.	bhavamahai	bhavadhvai	bhavantai.

In this we have only to supply the first personal ending

मि—mai, which the analogy of the other persons seems clearly to suggest, and the whole form will correspond nearly with the Greek.

Reduplicate Preterite.

Sing.	babhuvai	babhuvishai	babhuvai
Dual.	babhuvivahai	babhuvat'hai	babhuvatai
Plur.	babhuvimahai	babhuvidvai	babhuvirai

Passive Present Tense.

Sing.	bhuyai	bhuyasai.
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Personal endings as in the middle voice.

Reduplicate Preterite.

Same as in the middle Voice.

Participles present in the middle voice :

Bhavamanah bhavamanā bhavamanam.

Reduplicate Preterite: Babhuvanah, ā, am.

Future: bhavishyamanah.

Passive Present: bhuyamanah, ā, am.

The terminations would be represented correctly

thus; *μάνος, μάνα, μάνον*: and it is needless to remind the reader of the near correspondence of these forms with the Greek.



SECTION II.

Analysis of the Celtic Verb Substantive.

The verb substantive in Welsh grammars appears to a learner as if made up of the fragments of two or three defective roots, like the verbs substantive of other European languages. But in reality there is in the Welsh a verbal root, which is cognate with the Sanskrit *bhu* and the Persian *buden*, and which is like the former, perfect, or very nearly so, having as many extant forms as the Welsh verbs generally possess. This verb is in the infinitive mood *BÔD*, and *bôd* may perhaps be regarded as the root, although Dr. Davies gives that term to the third person singular of the preterite, which is *BU*, *fuit*. The third person of the future is, however, often the root of Welsh verbs, and this in the verb substantive is *BYDH*, *erit*. *Bydh*, if not the root, is the basis on which most of the modifications of this verb are formed.

Regular verbs have in Welsh, besides the infinitive and imperative moods, five distinct tenses or forms: these are two futures, one of which is indicative and the other conditional or subjunctive, a preterimperfect, preterperfect, and præterpluperfect tense. All these forms are extant in the verb *BÔD*. They are as follows.

PARAGRAPH I.

1. Future Indicative.

Sing.	bydhav	bydhi	bŷdh.
Plur.	bydhwn	bydhwch	bydhant.

N. It must be observed that the Welsh *y* in the penultima is a short *ŷ*. The ending *av* in Welsh stands for *am* in Erse, and the *v* is equivalent to *mh*, or is a secondary form of *m*.

N. It may be worth while, before we proceed further, to compare with this the future tense of the verb substantive in the Russian, as a specimen of resemblance in one of the eastern branches of the European languages.

Sing.	budu	budet'	budut'
Plur.	budem'	budete	budut'.

Compare also the potential form of the verb *buden*, to be, in Persian :

Sing.	budemi	budi	budi
Plur.	budimi	budidi	budendi.

2. Future Potential, Conditional or Subjunctive.

Sing.	bydhwyt	bydhych	bydho
Plur.	bydhwom	bydhoch	bydhout.

This form is varied as follows :

Sing.	bythwyv	bythy ch	bytho, &c.
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and contractedly thus :

Sing.	bwyv	bŷch	bô
Plur.	bôm	bôch	bôut.

N. Compare with the preceding the indefinite or subjunctive form in the Persian, which is also termed a future.

Sing.	buvem	buvi	buvéd
Plur.	buvīm	buvīd	buvend.

3. Preterimperfect.

Sing.	bydhwn	bydhit	bydhai
Plur.	bydhem	bydhech	bydheut.

This likewise is contracted by dropping the dh, as bawn for bydhwn.

N. This form is considered by Dr. Davies as appropriated to the subjunctive mood, oedhwn which is derived from another root being used in the indicative. In regular verbs, in general, this tense belongs rather to the subjunctive than the indicative.

N. Compare with the preceding the preterite of the verb substantive in Persian.

Sing.	budem	budī	bud
Plur.	budīm	budīt	budend.

4. Preterperfect tense.

Sing.	1. bûm, poetice buum and buym. Lat. fui (olim fuim ?)	
	2. buost	fuisti.
	3. bu	fuit.
Plur.	1. buom	fuimus.
	2. buoch	fuistis.
	3. buont and buant	fuerunt.

N. The relation of these inflections to the Latin is obvious.

In Greek and in Sanskrit the forms most allied to this preterite are the aorists, as,

Sing.	abhuvam	abhus	abhut
	ἔφυν	ἔφυσ	ἔφυ,
Plur.	abhuma	abhūtā	abhuvan,
	ἐφύμεν	ἐφύτε	ἐφύσαν.

5. Preterpluperfect Tense.

The preterpluperfect tense bears also a near resemblance to the corresponding form in Latin, and this is still more striking if we restore the s in the

place of *r*, where we have reason to believe that it originally stood.

Latin.	Welsh.	Latin.	Welsh.
fuesam	bhuaswn	fuesamus	bhuesym
fuesas	bhuasit	fuesatis	bhuesych
fuesat	bhuasai	fuesant	bhuesynt.

Imperative Mood.

Sing.	2. bydh, be thou.	3. bydhed, boed, bid,
Plur.	bydhwn.	bydhwch. bydhant.

Infinitive Mood.

bôd.

Persian, *buden* ; Russian, *buit'*.

The preceding are all the forms properly belonging to the verb *bôd* in the active voice, and, as before observed, they are as many as belong to any regular verb in Welsh.

Note. Before we proceed further, it will be worth while to compare the present tense of the verb substantive in the Erse dialect of the Celtic, with a corresponding form in the Slavonic language. The Erse has a present tense properly so called, although it is wanting in Welsh.

The infinitive mood and root of this verb in Erse is *beith*, to be. The following is the negative form of the present tense.

1. In the Erse, properly so termed, or Irish Celtic.

Sing.	Plural.
1. <i>ni fhuilhim</i>	<i>ni fhuilmid</i>
2. <i>ni fhuilhir</i>	<i>ni fhuilthidh</i>
3. <i>ni fhuilh</i>	<i>ni fhuilidh</i> ^b

^b *Gaëlic* (i. e. *Irish*) Grammar by E. O'C——, printed by J. Barlow, Dublin, 1808.

2. In the Gaëlic of Scotland.

Sing.	Plural.
1. ni bheil mi	ni bheil sinn
2. ni bheil thu	ni bheil sibh
3. ni bheil e	ni bheil iad ^c

Conditional form of the verb *buit'*, to be, in Russian.

Sing.	Plural.
1. ya bui buile	mü bui buili
2. tü bui buile	vü bui buili
3. one bui buile	oni bui buili ^d

Passive Voice.

The Celtic grammarians, like the Sanskrit, distinguish passive forms of the verb substantive. The passive voice, however, in the Celtic, has only the third person singular throughout the moods and tenses.

1. Future Indicative.

bydhir.

2. Future Subjunctive.

bydher, byther, and contractedly, baer.

Note. With byther or bydhir the Latin *futurus* is evidently cognate.

3. Preterimperfect.

bydhid, contracted beid.

Note. Compare the Sanskrit, *bhuyatai*.

^c Grammar prefixed to the Gaëlic Dictionary published by order of the Highland Society.

^d *Elémens de la Langue Russe*, Petersbourg. 1768. p. 133. *Praktische Grammatik der Russischen sprache*, von D. Johann Severin Vater. Leipzig. 1814. Tab. 7.

4. Preterperfect.

buwyd.

Note. Compare the Sanskrit bhutwa.

5. Preterperfect.

buasid and buesid.

Note. Compare in Latin fuisset or rather fuesit, the old form of fuerit.

PARAGRAPH 2.

Of defective verbs used as verbs substantive in the Celtic dialects.

Besides the verb *bôd*, which we have compared with its cognates, there are other defective verbs in the Celtic dialects used as parts of the verb substantive. In the Welsh it has been remarked that regular verbs want a present tense properly so termed. In fact, the Welsh grammarians give the denomination of a future to a particular form of the verb, which is used with both a future and present signification; and it is perhaps somewhat doubtful to which tense it properly belongs. That it is capable of expressing a present signification, without any metaphor or reference to the future, is fully evident from the instances adduced by the Welsh grammarian Dr. Davies, who observes, that in the Creed, the expression "*Credo in Deum Patrem*" is rendered by "*Credav yn Nuw Dâd*," and that in conversation "*Mi a welav*" means "*I see*," and "*Beth medhi di*," "*what sayest thou?*"

The following forms are considered as belonging to the present tense.

1. *Sydh*, and by apocope *sy*; *est*, *is*. This is used indefinitely in all numbers and persons.

2. Mae, est } only the third person extant.
 Maent, sunt, }
3. Oes, est. This has no inflections, and is used only as a third person singular.
4. Yw, pronounced yū; est. This is also used in the same way as sydh, and it is likewise inflected, as follows :

Singular.

1. wyv, perhaps originally *ywyv*.
2. wyt or wyd.
3. yw.

Plural.

- | | | |
|-------|--------|---------|
| 1. ym | 2. ych | 3. ynt. |
|-------|--------|---------|

There is another form of yw, with a sort of reduplication, thus :

- | | | | |
|-------|----------|----------|-----------|
| Sing. | 1. ydwyv | 2. ydwyt | 3. ydyw. |
| Plur. | 1. ydym | 2. ydych | 3. ydynt. |

There is a poetical form yttwyv, yttwyt, &c.

Passive Form.

Welsh grammarians distinguish likewise a passive form of this verb. It is as follows :

In the poets, and in the dialects of South Wales and Powys, ys.

The poets have also ydis; it is commonly ydys.

Note. It must be observed that the Welsh *ys* is pronounced like *us* in English, and exactly as the root अस—*as*, in Sanskrit.

The same root slightly modified, viz. is or isi, is extant in the Erse and Scottish dialects of the Celtic*; as

* Lhuyd's English-Irish Dictionary.

Sing. is mi, or is misi, I am,
 is tu, thou art.
 is e, he is.

Plur. 1. is sinn. 2. is sibh. 3. is iad^f.

Preterimperfect tense, in Welsh.

1. Active or variable form.

Sing. 1. oedhwn. 2. oedhit or 3. oedh.
 oedhyt.

Plur. 1. oedhym or 2. oedhych or 3. oedhynt or
 oedhem. oedhech. oedhent.

2. Passive or invariable form.

oedhid.

Cognates.

The form *ys*, which is perhaps the real etymon, is precisely the root in Sanskrit and in the European languages, which, adding the pronominal suffix always wanting in Welsh in the third person singular, as well as in the passive form, make of the same word, *ἔστί*, *est*, *ist*.

Note. It is remarkable that the verb substantive has forms appropriated to the present tense, while all other Welsh verbs are destitute of them. This circumstance may be accounted for. There being two distinct verbs substantive, and each having that form which is used, as we have seen, in the generality of verbs, sometimes with a future and sometimes with a present signification, practice, founded on convenience, at length appropriated the use of one of them to the future, and the other to the present tense. Hence *bŷdh* came to express "*it will be*," and *sydh*, *ys*, and *oes*, "*it is*," while, in respect to attributive verbs, which have a single form, the ambiguity still remains.

^f Shaw's Analysis of the Gaëlic Language.

SECTION III.

Inflection of a regular verb in Welsh through its moods and tenses.

The root or origin of a verb in Welsh is, as the learned Dr. Davies remarked, for the most part a noun, as *dysc*, doctrina; *dyscais*, docui; *câr*, amicus; *carav*, amo vel amabo. This substantive, adds the same writer, is generally identical with the third person singular of the future indicative, (as in Hebrew the third of the preterite is the root,) or with the second of the imperative, which forms are for the most part the same.

In some verbs, however, the third person of the preterite is the root, as *aeth*, daeth.

Indicative Mood, Present Tense.

There is, according to the Welsh grammarians, no present tense in attributive verbs, and this tense is supplied by a circumlocution, as

wyv yn caru, literally, *εἰμι ἐν τῷ φιλεῖν*, I am loving.

Note. All the other tenses may be formed by a similar circumlocution.

Preterimperfect Tense.

Sing.	1. <i>carwn</i>	2. <i>carit</i>	3. <i>carai</i>
Plur.	1. <i>carem</i>	2. <i>carech</i>	3. <i>carent</i> .

A tense seldom used in the indicative.

Preterperfect Tense.

Sing.	1. <i>cerais</i> , i.e. <i>kerais</i>	2. <i>ceraist</i>	3. <i>carodh</i>
Plur.	1. <i>carasom</i>	2. <i>carasoch</i>	3. <i>carasant</i> ^a .

^a See Dr. Davies's Grammar, entitled, *Antiquæ Linguae Britannicæ Rudimenta*, from which, and from the grammar prefixed to Richards's Dictionary, the following as well as the preceding conjugations of Welsh verbs are extracted.

The principle on which this and the following tense are formed seems to be the insertion of the syllable *as* or *ais* between the root and the personal endings, and a change of the radical vowel in a mode analogous to the Sanskrit form *guna*. Both these changes have been traced in the inflections of verbs in the Sanskrit and European languages. And the modification of the vowel by *guna* is, in Sanskrit, as in Welsh, confined to particular persons in the tense.

Preterpluperfect Tense.

Sing.	1. caraswn	2. carasit	3. carasai
Plur.	1. carasem	2. carasech	3. carasent.

Future Tense.

Sing.	1. carav	2. ceri	3. câr
Plur.	1. carwn	2. cerwch	3. carant.

Imperative Mood.

Sing.	1. —	2. car	3. cared
Plur.	2. carwn	2. cerwch	3. carant.

Potential, Optative, and Subjunctive Mood.

Present Tense wanting.

Preterimperfect Tense.

Sing.	1. carwn	2. cerit	3. carai
Plur.	1. carem	2. carech	3. carent.

Poetic Form.

Plur.	1. cerym	2. cerych	3. cerynt.
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Preterperfect and Preterpluperfect.

Sing.	1. caraswn	2. carasit	3. carasai
Plur.	1. carasem	2. carasech	3. carasent.

Or, Poetic Form.

Plur.	1. caresym	2. caresych	3. caresynt.
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Future Tense.

Sing.	1. carwyv	2. cerych	3. caro
Plur.	1. carom	2. carech	3. caront.

Infinitive Mood.

caru, amare.

This one form, taking various prefixes, as yn caru, in amando, serves the purpose of Infinitive, Gerunds, and Supines.

Passive Voice.

The Welsh language has a proper passive voice^b; but the tenses have no variety of endings to distinguish the persons.

Indicative Mood, Present Tense.

Formed by a circumlocution, the infinitive used as a gerund, being constructed with the passive form of the verb substantive; as

yr ydys yn	{	vy ngharu, amor.
		dy garu, amaris.
		ei garu, amatur.

Note. Literally εἰμὶ ἐν τῷ μου φιλεῖν, &c.

The plural is similarly formed; but the future is likewise used as a present tense.

^b In this as well as in the number of tenses in the active voice, the Celtic language is richer than the Teutonic. In the latter, according to Dr. Grimm, the Mæso-Gothic is the only dialect that preserves any remains of a passive voice; and in that only the present tense indicative and subjunctive is extant. The following words are examples: galeikôda, it is likened; galeikozâu, thou mayest be compared; haitanda, we are called; halyáindau, they may be hidden. Grimm's D. Gram. p. 855. There are likewise some indications of a middle voice in the Gothic version.

Preterimperfect Tense.

Cerid vi, ti, ev, ni, chwi, hwynt.

Preterperfect Tense.

Carwyd vi, ti, &c. Amatus, sum, es, est, &c.

Preterpluperfect Tense.

Carasid, or caresid, vi, ti, &c.

Future Tense.

Sing. Cerer vi, ti, ev.

Plur. Cerir ni, chwi, hwynt.

Imperative Mood.

Sing. and Plur. Carer, vi, di, ev, ni, chwi, hwynt.

Potential Mood, Present Tense.

Sing. and Plur. Cerir vi, di, &c.

Preterimperfect Tense.

Sing. and Plur. Cerid vi, di, &c.

Preterpluperfect Tense.

Sing. and Plur. Caresid vi, di, &c.

Future Tense.

Sing. and Plur. Carer vi, di, &c.

Participles.

Caredig	{	i dhyn, amans homini.
		gan dhyn, amatus ab homine.
		dyn, amatus vel dilectus hominis.

Caradwy, amandus.

Note. This form is nearly analogous to the Sanskrit adverbial participle bhu-twa.

Such are the inflections of passive verbs in the Welsh language. They contain but a few instances

of interpolated syllables, and those have been already remarked. The greater part of these inflections consists, excluding the personal endings or affixes, of slight variations in the final syllables, and chiefly in the vowels, very analogous to the changes which distinguish the moods and tenses of the passive voice of Latin verbs, particularly in the third conjugation.

SECTION IV.

Conjugation of a regular Verb in Erse.

Present Tense, Indicative Mood.

Verb, Cesaim or kesaim, I torment.

Note. The root of the verb is said to be the first person of the present tense, the last syllable being cut off.

Sing.	1. Cesaim.	2. cesair.	3. cesaidh.
Plur.	1. Cesamaid or cesam	2. Cesthaí.	3. cesaid.

Preterite.

Sing.	1. Do chéas.	2. chéas.	3. chés.
Plur.	1. Do chesamar or do chessam	2. chesabhar.	3. { chesadar or chessad.

Note. It may be perceived that the form of the present cesaim nearly corresponds with that which the Welsh grammarians term a future tense terminating in *av*, and that the preterite in *as* agrees with the Welsh preterite in *ais*. The Erse language has adopted a peculiar form for a future tense, made by inserting a syllable *fá* between the root and the personal endings. This insertion, however, is not used in all verbs.

Future Tense.

Sing. 1. Cesfad.	2. cesfair.	3. cesfaidh.
Plur. 1. Cesfamaid or cesfam.	} 2. cesfaidhe.	3. cesfaid.

Imperative.

Sing. 1. ———	2. ces.	3. cesadh.
Plur. 1. Cesam.	2. cesaidhe	3. cesaid or cesadis.

Potential Mood.

Preterimperfect Tense.

Sing. 1. Do chesfainn.	2. chesfa.	3. chesfadn.
Plur. 1. Do chesfamair.	2. chesfaidhe.	3. chesfaidis.

Infinitive Mood.

Cesadh or do chesadh, to torment.

Note. The different tenses have another form without the personal endings, in which case the personal pronouns are immediately subjoined.

Passive Voice.

Indicative mood, Present Tense.

Cestar me, thu, é, inn, ibh, iad.

Note. As in Welsh, only one form in the passive for all the pronouns.

Preterite.

Do chesadh me, thu, &c.

Future.

Cesfaidher me, thu, &c. or cesfar me

Imperative.

Cestar me, thu, &c.

Potential, Preterimperfect.

Do chesfaidhe me, thu, &c.

Infinitive.

Do bheit cesta, to be tormented.

Participle.

Cesta, tormented.

For the varieties and irregularities of verbs in the Erse, as well as of the Welsh, I must refer to the grammars of those languages.

SECTION V.

Concluding observations on the Celtic verbs, with general remarks on the grammatical peculiarities of the Celtic languages.

The observations made in the two last chapters allow us to conclude that the inflection of verbs in the Celtic dialects, excluding for the present the consideration of suffixes, or the systems of personal endings, which were previously compared, is founded on principles similar to those which prevail in the Sanskrit and in several European languages. The Celtic verbs do not display any traces of the preterite by reduplication, which is so remarkable a feature in the eastern branches of the Indo-European stock of languages, and which is also found in the Latin and Teutonic; but they change the middle vowels in a mode analogous to that which these four languages possess, under the form termed *guna* by Sanskrit grammarians, and they interpolate similar consonants or syllables for the purpose of distinguishing moods and tenses, the varying terminations, particularly in the passive voice, being closely analogous to those of the other old European idioms, and especially to the Latin.

When we connect the consideration of these analogies with the results formerly obtained on comparing the systems of personal endings or suffixes, it will perhaps not be going too far to say, that the whole structure of inflections in the Celtic dialects is founded on principles similar to those which are the groundwork of verbal conjugations in the other languages compared with them.

The principal affections which words undergo in the construction of sentences in the Celtic languages, may be referred to two heads; first, interchanges between cognate letters on a principle which we have compared with that of sandhi; and secondly, the inflections of verbs. In these consists a great part likewise of the peculiarity of the Sanskrit language^a. In both respects there is a remarkable congruity between the Celtic and the Sanskrit. There is a third series of variations in words common to the Sanskrit and several European idioms, in which the Celtic dialects are more defective than some other ancient languages of Europe and of the East, I mean the declensions of nouns.

Welsh nouns make their plural number nearly on the same principle as several of the European languages. They add terminations in *i*, *au*, *ion*, &c. and they vary the interior vowels of words.

Welsh nouns have no cases properly so called, but the want of them is supplied by prepositions which have not coalesced with the words governed by them, as they appear in other languages to have done in such a manner as to give origin to cases^b.

^a The different forms of samasa and sandhi occupy a considerable space in the Sanskrit grammars of Vadaraja and Vopadaiva.

^b Such at least, according to the opinion defended by Bopp,

In the Erse dialect nouns have a very peculiar mode of declension. The following may serve as an example :

An bard, a poet.

Sing. Nom.	an bard,	Plur. Nom.	na baird,
Gen.	an bhaird,	Gen.	na mbhard,
Dat.	o'n mbard,	Dat.	o na bardaibh,
Acc.	an bard,	Acc.	na barda,
Voc.	a bhaird.	Voc.	a bharda.

It is worth while to notice particularly the dative plural, which generally terminates in *aibh*, though this perhaps admits of a variety, for it is given by Lluyd in *uibh*. The terminations in *uibh* or *aibh* are plainly related to the old Latin dative, in *obus* and *abus*, which was probably the genuine and original form of this case in Latin. The Sanskrit datives plural end in *ābhyūṣ* or *ābhyah*, or at least in *bhyus* after a vowel, as राजभ्यस—*rajabhyus* ; Latin, *regibus* ; Erse, *righaibh* or *rioghaibh*.

SECTION VI.

General Inference.

I have thus laid before my readers the most obvious and striking analogies between the Celtic dialect is the origin of Sanskrit cases, and therefore also of Greek and Latin, which so nearly resemble them. Professor J. Grimm, however, who has examined, with a view to this question, the cases of the Mæso-Gothic and other Teutonic dialects, seems inclined to a different opinion, as far as those languages are concerned. He concludes his inquiry into this subject (*Bedeutung der casusflexion*) with the remark—*Die Casuszeichen bleiben mir ein geheimnisvolles element das ich lieber jedem worte zuerkennen will, als es von einem auf alle übrigen leiten*. Th. I. p. 835.

lects, and the languages which are more generally allowed to be of cognate origin with the Sanskrit, Greek, and Latin. On the facts submitted to them, they will form their own conclusion. Probably few persons will hesitate in adopting the opinion, that the marks of connexion are too decided and extensive to be referred to accident or casual intercourse, that they are too deeply interwoven with the intimate structure of the languages compared, to be explained on any other principle than that which has been admitted by so many writers in respect to the other great families of languages belonging to the ancient population of Europe, and that the Celtic people themselves are therefore of eastern origin, a kindred tribe with the nations who settled on the banks of the Indus, and on the shores of the Mediterranean and of the Baltic. It is probable that several tribes emigrated from their original seat in different stages of advancement in respect to civilization and language, and we accordingly find their idioms in very different degrees of refinement; but an accurate examination and analysis of the intimate structure and component materials of these languages, is still capable of affording ample proofs of a common origin.

My present inquiry has been professedly confined to language; and I must refer to my former work for the confirmations which the inferences now deduced may obtain from other sources.

NOTE ON THE SEMITIC LANGUAGES.

AT the conclusion of a work designed to illustrate the mutual affinity of those idioms which are termed collectively Indo-European, it will not be improper to add a few remarks on the relation between the latter and two other families of languages, which have co-existed with them from the earliest periods of history.

One of these is the class of idioms termed by German philological writers *Semitic* languages. This designation was, I believe, first suggested by Eichhorn, who has remarked that the three principal branches into which the idioms belonging to this class divide themselves, viz. the Hebrew or the dialect of Palestine and Phœnice, the Arabic, and the Aramæan or northern Semitic spread over Syria and Mesopotamia, are as nearly related to each other as the Ionic, Æolic, and Doric dialects of Greek^a. The term *Semitic* has been thought by some to be objectionable, on the ground that several of the nations who spoke the languages so denominated, in common with the descendants of Shem, were of Hamite origin, as the Phœnicians or Canaanites. It has, however, got into general use, and must therefore be retained. Schlözer, the learned editor of Nestor's annals, has proposed on similar grounds to name the Indo-European dialects *Japetic* languages, most of the nations by whom they are spoken having descended, as it is generally believed, from Japhet. We might perhaps, with less hesitation, apply the term *Hamite* to the third family of languages, to which I have alluded. I refer principally to the dialects of the old Egyptian speech, the Coptic, Sahidic, and Bashmuric, including *conjecturally*,

^a Einleitung in das Alte Testament, von Joh. G. Eichhorn. B. I. p. 49. Dritt. Ausg.

^b A. L. Schlözer, von den Chaldæern, Repertorium für biblische und morgenländische literatur. th. 8.

until the mutual relations of these languages shall have been more fully investigated, several idioms spoken by races of Africa, in whose history marks are to be found of connection with the ancient subjects of the Pharaohs. One of these is the dialect of the Noubas, Barábras or Berberins of the Upper Nile, a race who strikingly resemble the ancient Egyptians in their physical characters, as we know by comparing the present Berberins with the paintings and mummies preserved in the Egyptian catacombs^c. They are probably the offspring of the ancient Ethiopians of Meroë, who in a later age were the subjects of queen Candace. Another race, much more extensively spread in Africa, are the descendants of the Libyans. The Showiah, spoken by the Kabyles among the Tunisian mountains, and the Amazigh of the Berbers and the Shilha of mount Atlas, are dialects of their language, which has been traced from the Oasis of Siwah to the Atlantic ocean, and which seems also to have been the idiom of the Guanches in the Canary islands, whose curiously desiccated mummies bear, as Blumenbach has shewn, much resemblance to those of the Egyptians, and indicate a very ancient connection among the tribes of northern Africa in arts and customs^d.

It seems to be the prevalent opinion among philological writers of the present time, that the three classes of languages above referred to, namely, the Indo-European, the Semitic, and the Egyptian dialects, are entirely unconnected with each other, and betray no traces even of the most remote affinity. A late writer, whom I have before cited, seems to hold this opinion in a very decided manner in reference to the Semitic and Indo-European idioms.

“It has been asserted,” says Col. Vans Kennedy, “that the Greek contains more Arabic words than is generally supposed; but until these words are produced, and their identity established, I must doubt the correctness of this assertion; for I have never been able to discover any such identical terms.” He concludes, that “the portion of

^c Researches into the Physical History of Mankind, vol. i.

^d Blumenbach's *Decades Craniorum*.

“Asia which comprises Arabia and Syria was peopled, or
 “at least inhabited from time immemorial, by a distinct
 “race of men, who spoke a language peculiar to them-
 “selves; and that this language, with its cognate dialects,
 “has been at all times confined to these countries, and
 “that it never has extended its influence beyond their
 “limits, except to a small part of Africa.”

It must be allowed, that the Semitic dialects constitute a very distinct department of languages, which can by no means be associated or brought into the same class with the Indo-European idioms; yet it is by far too much to affirm that there are no traces of connection between the two classes. In the preceding remarks upon the Indo-European languages, some futures have been pointed out which display a remarkable analogy to the well-known characters of the Hebrew and its cognate dialects; I shall only instance the system of pronominal suffixes. This is one point in which the Celtic, at the same time that it appears to be the least artificial and grammatically cultivated of the Indo-European languages, forms an intermediate link between them and the Semitic, or perhaps indicates a state of transition from the characters of one of these classes of languages to those of the other.

In my work on the Physical History of Mankind, I ventured to remark, that a very considerable number of the vocables belonging to the Semitic dialects may be recognised in some of the Indo-European languages. It would be foreign to the object of the present work to enter at large into a proof of this opinion; but I shall here adduce a few instances of undoubtedly cognate words, which will be sufficient to render it probable that a much larger number may be discovered by an extensive and accurate research.

Among the first ten numerals there are a few terms which appear to be cognate.

Semitic Dialects.	Indo-European Languages.
1. echad, Heb.	aika, Sansk.
	yik or eek, Pers.

Semitic Dialects.

Indo-European Languages.

3. Ordinal in Chald.

3. Ordinal in Sanskrit.

תְּלִיתַי—tlithay, (Dan. ii. 39.) tritaya.

6. shesh, Heb.

shash, Sansk.

7. shevang, Chald.

seven, sibun, &c.

The following are some verbal roots and nouns which are evidently of the same origin. Among them are verbs which nearly resemble the two verbs substantive already traced in the Indo-European language.

בִּית—bith from בִּית—büth,

beith, Erse.

Chald. to tarry, dwell, (Dan. vi.

býdh, bôd, W.

18.) often used in the Targum

buden, Pers.

for לִין. In Arabic this word is

bhu, Sansk.

בַּת—bat, or בֵּית—beit, to

be, beon, Teut.

tarry, be situated^e.

But the verb in Hebrew which closely corresponds with the Indo-European verb substantive, and in fact identical with it, is יֵשׁ—yesh, he is; in

It can hardly be doubted that יֵשׁ is a real cognate of the Indo-European verb. See p. 83. above.
is, Erse.

Arab. ايس—is^f.

ys, Welsh.

as, Sanskrit.

&c. &c.

khól, (whole, all)

ἅλος.

hólh, Welsh.

hôr, hōim, hori, (mountain)

ὄρος, ὄροι.

láish, (lion)

λέων.

leôm, (people)

λεώς.

luach, (a stone table)

lhêch, (a flat stone.)

λίθος.

loang, (throat, swallow)

lung, lingua.

tôr, tôri, (Chald.)

ταῦρος, ταῦροι.

keran, (Chald.)

cornu, κέρας.

gúvra, (Chald.)

gwr, vir.

^e Buxtorf. Lex. Heb. p. 69. Michaëlis Supplem. in Lex. Heb. voce בִּית.

^f Gesenius's Lexicon, Cambridge edition. See Genes. xxviii. 16. Deuteron. xxix. 17, &c. p. 316.

Semitic Dialects.	Indo-European Languages.
ærez, in Chald. אֶרֶץ—argha (ʾ being, however, often mutable into d, which would make ærda.)	erda. erth. dhara, daiar. terra.
עֲבִי—gnabi (clouds)	nabhah, Sansk. nubes.
נַעַר, pronounced <i>Nep</i> in Ori-gen's Hexapla, Hos. ii. 1. (a youth.)	narah, Sansk. ἀνήρ.
נַעֲרָה—naerah, puella.	narī, Sansk.
ganaz	γάνος.
chetoneth	χιτὼν.
sepel (Jud. v. 25.) (a cup)	simpulum.
yayin	vinum.
Here we find ׀ standing for the digamma or vau. An insertion of the vau will convert many Hebrew into Indo-European words, as	
2. yadang (know,) in Pih. yid-dang.	vidan, εἰδεῖν. οἶδα, vaida.
3. halak	walk.
4. rong (evil)	wrong.
5. chiva (an animal) chavah, life.	vivo, viva, jīva, Sansk.
6. ragang	ρήγνυμι, frango, i. e. frago.
kúm, (arise, come)	komm, come.
laat, (to hide, secret)	lateo, λήθε.
arar, aru, ar, (curse)	ἄρα, ἀράομαι.
ād	ad, at.
lakak, also lakhak and likhak	liha, Sansk. λείχω, lick.
דָּוָד—ud	udus, ud, Sansk. ὕδωρ, &c.
thiggenu (Gen. iii. 5.)	θιγγάνετε, (Gen. iii. 5.)
tardemah ex radam	traum, dream.
mōth	motus.
moth and } mēth }	meath } meatham }
olem, (age)	Erse, to die. olim, Lat.

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Semitic Dialects.	Indo-European Languages.
charats, (cleave, wound slightly, Gesenius)	$\chi\rho\acute{\alpha}\sigma\sigma\omega$. scratch.
לחלל —laghah, (to babble)	The same element in $\lambda\alpha\acute{\kappa}\acute{\epsilon}\omega$, laugh, lächeln, loquor ?
לחלל —laghaz, (speak barba- rously)	
לחלל —laghag, (laugh and speak unintelligibly)	
In all these we recognise one element.	

PRONOUNS.

atta, pron. (thou)	tu.
ta, suffix.	ta, t'ha, suffix in Sanskrit.
hi, (she)	hi, si.
hu, (he)	evo.
anu, suffix NU.	ni, nos, nau.

No sufficient comparison of the Egyptian and other Northern African dialects with each other and with the Semitic languages has been made to allow of any general statement as to their relations. I may however observe, that those who have denied that any affinity can here be traced appear rather to have presumed the fact than to have proved it. The affinity of some striking words among the personal pronouns in the Egyptian and Hebrew languages is such as to excite a strong suspicion that more extensive resemblances exist, though it does not appear probable that the idioms of Northern Africa are even so nearly related to the Semitic, as the latter are to the Indo-European languages.

ERRATA.

- P. 10. discovered *read* dissevered
 P. 75. display *read* displays.
 P. 93. are *read* is.
 — they have *read* it has.



